

Under the Sails



A rough outline of the possible use of ships in the world of Warhammer - Fantasy Roleplaying

An unofficial supplement

This supplement would not have been possible without the following people: Natascha Chrobok (without her great work on the monastic orders I would never have had the courage, for being a really nice person and thanx for the allowance to use your name), Andrew L. (who has not shunned the cost to mail me an interesting article from Malaysia to Germany), Sirius (who provided me with an excellent work on shipwrights and ships in general that he converted from Harnmaster plus three excellent links), Garrett Lepper (who has done a tremendous amount of work for WHFRP and who is, in a way, responsible for all of this), James M. Davidson (who created a great price list for Harnmaster, that Sirius later converted into the WHFRP currency), Leif Eriksson (who allowed me to have a look at his copy of Man O' War), The Roach (for converting it into pdf) and finally Timothy Eccles (who has wasted his time with correcting my many errors).

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I was born on the 20th of December 1974 in Hannover, Germany. Started gaming back in or around, the memory is a little vague here, 1982 with some German AD&D look-a-like. I began with more serious roleplaying in 1990 with Rolemaster and Traveller, that were later followed by Call of Cthulhu, Harnmaster and Warhammer FRPG. My collection of systems speaks of a lot of money used.

After I did my military service, which is compulsory in Germany, I began to study Law, with a specialisation on Competition and Antitrust Law. I have not spend my military service in the German Navy, instead I have belonged to happy few, that are allowed to take a daily bath in mud. With the end of my military service I also basically stopped to play RPGs. Today I seldom play and most of my ideas were just developed for fun.



The idea to this supplement was the product of various posts on the WHFRP-List, to which I more or less regularly post. It was further triggered by Natascha Chrobok's work on Monastic Orders.

For readability purposes, this supplement uses standard masculine pronouns when referring to persons of uncertain gender. In such cases, these pronouns are intended to convey the meanings: he/she, his/her, etc.

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WHAT VERSION?

There are a number of different versions of Warhammer on the market. This text does not really fit in any of these versions.

It was not my aim to use a sole version and the text may be incoherent to one or more of these version. For example Warhammer has in one of its versions the dwarven ironclads. These ironclads are not used in this text.

I have tried to make it „historically correct“. That means, that I have tried to use many references from history of the later middle ages and the early renaissance. That does not, however, mean, that is text is really correct, since I have left out many things, simply because I did not like them. The best example of this is the relative low amount of sailing ships and the (more or less) dominance of the galleys.

Therefore the answer to the question „What version?“, would be „None“ or „Any“.

FOREWORD

Well, it took me an awful amount of time to write this little manuscript. What was planned as a ten or twenty pages handout, has turned into a behemoth. I do not know, if it is useful, but I hope so.

The reasons for doing this are numerous. The first was a remark by Garrett Lepper, who once said I should not complain about off-topic discussion on the WHFRP-list and instead should contribute, I hope that Garrett sees this as a contribution to Warhammer. Secondly I have always liked adventures set on ships, mainly because the environment is pretty closed off, which gives it a „Murder on the Orient Express“ feeling. There is also the aspect of

„the expedition“, which I consider to be much more important to RPG, than just another dungeon-crawl. In fact when I play MERP, which I hardly do these days, I have always enjoyed travelling through Middle Earth in the footsteps of Isildur or Durin, rather than fighting a bug-eyed green monster in a damp cellar.

One irritation for some of you will no doubt be my use of metric measurements and not the strange measurements used on the sea, like knot, fathom, etc. There are two reasons for this: Firstly, I was educated with the metric system and think of the other strange measurements as (imperial) leftovers. Secondly I think that it is much easier for everyone to image how long a metre is, while he or she has to look up, what a cable is - it is 185 metres by the way. Thus I have solely used metric system. If you think that such a system is either illogical, stupid, a symbol of continental Europe to tame England or all of the above, you are of course free to change it. Therefore the Appendix K has a number of historical measures and their conversion factors into the standard SI-system.

Many parts of the manuscript are not extensive, while others may contradict each other. I have tried my best to avoid such contradictions, but I fear there are many. In the end you should never ever focus too much on the written word, and if something does not suit you, do not use it. In my experience, players, with the exception of some rules lawyers, are satisfied when an adventure or campaign runs smoothly, even, when some information are very vague. In the end, it is just a game.

To cut a long story short, I think ships can be an important aspect of any gaming world and that every GM should think about using them, with or without my manuscript.

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INTRODUCTION

*The ship was cheered, the harbour cleared,
merrily did we drop
below the kirk, below the hill,
below the lighthouse top.*

*The sun came up upon the left,
out of the sea came he!
And we shone bright, and on the right
Went down into the sea.*

*And now the storm-blast came, and he
was tyrannous and strong:
He struck with her o'ertaking wings,
and chased us south along.*

*S.T. Coleridge - The Rime of the Ancient
Mariner*

Water, the essence of life. It is life-giver and can also take. Many men and women have been lost on the ever-moving hills and valleys of the sea. Yet every day, hundreds make a step onto this unsafe terrain. Into a realm that can never be tamed.

Their reasons are diverse: Some gather the fruits of the sea, while others want to bring war upon their neighbours from their swimming fortresses. Whatever the reason may be all fear the sea and its unpredictability. Out in the openness of the sea, monsters are rumoured to live, that are able to sink even the biggest of ships with ease.

However every sentient race has risks entry to this realm. They have crossed oceans and lakes, unaware of what may await them a few hundred feet below in the pitch-black night that is never penetrated by a ray of light. Since none of them is adapted to this domain, they have begun to build vessels. In the beginning they were little more than a few tree trunks tied together. Today the number of types of ships is enormous, from the fast longboats of the Norscans to the behemoths of Araby, and from the small fishing ships, to the manoeuvrable three masts sloops of the elves.

Another importance of the sea is for trading. Despite the dangers the sea is an invaluable

transportation route. Cities like Marienburg would be nothing without the sea of claws and the existence of Cathay would even be unknown around the tables of power in Altdorf, if ships did not exist.

Even though people have ventured into the realm of water for a few hundred years, they do not trust it. Too many have disappeared without trace or anything left for their relatives to bury. Some of these deaths were caused in the battles of two rival nations, while others have simply disappeared, sometimes together with their ship, and no one ever dared to uncover the reason, that they have taken into the wet grave.

The ships vary considerably in size. The biggest resemble small cities floating on the waves, with enough supplies to spend months on the ocean, before returning to the next harbour. The smallest on the other hand, provide nothing than a little shelter from the wind and weather.

Today nearly every nation of the Old World keeps its own fleet, its size depending simply on the treasure of the nation. Some of these fleets have little more than a picturesque meaning and the ships are so out-balanced that they can capsize at the first breeze, while other nations, notably Norsca, have a highly effective fleet of ocean-going vessels that can fulfil any task that can be achieved on the waters, from reconnaissance to trading, from expeditions to warfare.

Even though naval warfare is still in its infancy and, with the exception of the elves, resembles battle on land, it has seen an impressive development during the last centuries. Today the military schools of the Old World have begun to develop specific naval tactics, as well as weapons exclusively for ships, instead of simply mounting siege engines on a ship in the hope that a catapult may prove to be as effective against ships, as it is against a wall or a tower.

HISTORY

The history of sailing must be as long as the history of sentient beings. We have nearly no information of the first seamen, but we can assume that they must have been elvish.

The earliest records come from the so called Sikar-discovery. These records date back to the beginning of human kind and even before, although we cannot give an exact date, we can only guess here. They tell of vessels that cross the oceans. To give the reader an impression of what these vessels may have looked like, a transcript is given here. The reader should nevertheless be careful with construing this passage, since we are still unable to fully understand the symbols in which the text is written. Possible interpretations are given in parentheses.

We follow the wind over the big sea [Great Western Ocean?]. Our Roumshik [vessel?] flies over the hills. It [the vessel?] is manned with thousand and thousand and thousand of our warriors and lightusers [the number could also just mean many and not give a precise number] and they are brought back to the threshold [?]. While we steer to the top, many beasts can be seen below that follow our path.

As the kachtain [captain] orders it to increase speed, the mighty fires begin to burn brighter [we assume that the speed increases the morale of the crew]. We are now moving as fast as the sun crosses the sky and should reach the threshold in one cycle.

As the reader may have noticed, some things are odd about the text. Firstly, we do not know how big it was. As the possible interpretation above gives the number of three thousand, this cannot be the exact number and must be taken as an expression that the vessel had many men. Secondly, the reference to the beast, which the writer sees below can mean one of two things. Either the sides of the vessel were very high, so that the writer looked down from a great height. The other possible interpretation, though unlikely, is that the vessel is made out of glass

and the passage refers to animals the writer sees under the water.

We also do not know what the *threshold* may be. Some scholars argue that the threshold referred to the gates of a city, while others take it just as an expression for destination. The first opinion is supported by the fact that threshold in the Sikar-discovery only seems to refer to one or two places. Yet we have not found the remains of any such city. The second opinion is supported by the fact that threshold normally refers to an entrance that someone can step through. However, it is exclusively used in connection with these vessels and no one knows of a threshold that can be passed by a whole ship, unless the word threshold refers to the entrance of a harbour.

We also do not know how the ship is propelled. The first line may point to sails, but on the other hand the writer says that the captain orders the ship to go faster. Unless some powerful, unknown, magic is involved we do not know of any way to increase the speed of a ship.

The speed of the ship is also unknown. The reference that the ship moves faster than the sun certainly is wrong. A grammatical interpretation would mean that such a vessel could cross the Great Western Ocean in a day. Therefore most scholars argue that this just means that the ship is moving very fast.

Still the Sikar discovery is mostly a mystery and many things are vague. We can assume that it needs more than the life of one scholar before we can fully comprehend the meaning of the whole text.

No matter who wrote the texts that are now known as the Sikar-discovery, we can assume that the first humans and elves to put a foot on this world, also made their first steps on the waters.

The first crafts were certainly simple rafts and canoes that can be found throughout the world even today. These first vessels must have been exclusively used on rivers, lakes and bays since neither of them was very seaworthy. The next step in the evolution of the ship may have been

simple rowing boats, as many drawings found in Araby show them. There is, however, little empirical evidence to support this contention.

The famous Martinus von Vorbekke, often called Martinus from Nuln, has argued in his long treatise on sailing, that all ships developed out of few very simple forms. He calls his first form, *Northern*, while the later is called the *Southern* form. The basic difference between the two form is that the northern form has a keel, while the southern form does not. Martinus has given the best explanation by pointing out that the Southern Sea, caught between the Old World and Araby is in general much more becalmed, thus a keel does not have the importance it has in the Great Western Ocean, the Middle Sea and the Sea of Claws. The best example of this theory is the longboat for the northern form, that has a keel and is seaworthy, and the ordinary Arabian galley that, at least originally, had no keel.

Elven Naval Culture

It is common knowledge among all scholars that the elves were not only the first seamen of the world, but also that they remain the most experienced.

With the Elven kingdom as their homeland it was necessary for them to „invent“ ships in order to reach other parts of the world. This has left the elves with a long and rich tradition of sailing. Their ships surely are the rulers of the seas today. Although many nations like Bretonnia and Magritta have tried to rival them, even their best ships are nothing more than hulks compared to the Elven ships.

The elves and their vessels can be found on almost any sea today and of what we know they have crossed the distance to Lustria and Cathay centuries before the first humans have build their ships. Yet many of their design remain a mystery to us, as the elves are not eager to share their superior knowledge and conceal their ships wherever possible.

Their position could be rivalled by our much more straightforward race, but until then the elves in fact rule the waves.

As far as we know the elves have founded three colonies. The Citadel of Dusk in southern Lustria, the Fortress of Dawn in the very south of the Southlands and Arnheim which is supposed to be on the east coast of the New World. Just these three examples show that the elves have an intimate knowledge of all continents and the sea.

We know of at least three races: the high elves, the sea elves and the forest or wood elves. Although they all seem to come from a common race of elves, they seem to have become different kinds of elves.

The high elves are the rulers of Ulthuan and are by many seen as the nobility of the elves. But we do not know if they really are the upperclass or not. What we know is that the Phoenix King always was a High Elf and that many of the most famous elves were in fact high elves. Since the high elves are only rarely seen in the Old World, we can assume that they are not often sailing the oceans.

The sea elves on the other hand are seen as the most experienced seamen in the Old World. The name sea elves could come from the fact that they live on the shores of Ulthuan, but it could also mean that all elvish sailors are sea elves. Whatever the truth, the sea elves are certainly the kind most closely connected with the sea. The sea elves form the bulk of the elven fleets, equally in trade and warfare.

The forest elves or wood elves are not very closely connected with the sea. We know that they build boats, but these are only used on the lakes and rivers of their home territory. As far as we know, the wood elves are not seen on ocean-going vessels. They may in fact have lost many of the characteristics of the high and the sea elves due to the long time since they have left Ulthuan. The wood elves are also the only kind of elves that can be regarded as a race of its own, although they are as closely connected

to the elves of Ulthuan as the people of Norsca and Tilea are to each other.

Some believe the dark elves to be a unique race, but most argue that they are just an offspring from the other races, especially the high elves, who left Ulthuan for political reasons, much like the wood elves. The dark elves are one of the few enemies that the high elves fear. During the least few centuries, the two groups have fought each other again and again. Neither was powerful enough to achieve a decisive victory and the two have come to constantly use guerrilla tactics. This would not worry us, if not the dark elves have begun to attack human settlements as well. No matter how fearsome the Norscan longboats were centuries ago, they were nothing compared to the black arks of the dark elves. Fortunately the dark elves are more interested in overthrowing or weakening Ulthuan, than planning an invasion on the coasts of the Old World.

Human Naval Culture

Humans may not be the best sailors of the world - this honour belongs to the elves alone - but they are probably the most divergent.

Telling the history of human beings is almost impossible, since the humans never formed a unified nation and every state has its own history with the sea.

Our race is probably the most numerous ever on this world. The different kinds of human beings are much more different from each other than any other race from their historical background. It is even unknown, if all human beings are descendants of a race or if the different kinds have evolved independently.

All nations and states have build their fleets and refined the old rafts into three-masted galleons, but they are unable to rival the elves. However a time will come when we will have become masters of the sea and replace the elves - very much as we have taken their place in the Old World.

The historical development in the different nations of the Old World depended very much on the importance of the sea. The Norscans can look back at an old and long tradition of shipbuilding, while Kislev or the Empire have little experience with shipbuilding.

Araby

Araby can look back on a pretty long tradition of navigation. This is especially surprising since the Arabian are, as far as we know, descendants from nomadic tribes. Yet after they have begun to settle along the north coast of the southern continent, they have also begun to build ships.

The first must have been nothing than bigger versions of their river vessels. But they must also have access to much older knowledge. Most scholars believe that the Arabian have taken the place of another much older civilisation and have used their designs to build seagoing vessels. The cedrack is possibly the best example of this.

The Arabians have used ships for warfare very early and have begun to develop a number of tactics. Contrary to the other nations, the Arabians have only lately begun to use galleys. Their first ships were sailing ships and they have used these for warfare. Only lately, that is a few hundred years ago, have they begun to copy the design of the galley and it is now their most frequent used battle ship. However they mostly use sailing ships for trade and some military operations.

Brettonnia

Brettonnia had begun with navigation even before it existed. The land between the Grey Mountains and the river Brienne was always home to fishermen even before Guy le Bretonne was even born. After the nation of Brettonnia was formed the tradition survived.

After Brettonnia became aware of the importance of ships in warfare and the trade begun to flourish, the fishing ships were used for trade and warfare. Over the following

centuries this fleet of fishing boats has developed into one of the largest fleet of the Old World. This was only possible under the strict leadership of a strong admiralty. The downside of this was however that the administration of the Bretonnian fleet has grown disproportionately to the number of ships. This was discussed in detail by Alphonse de la Paul and later called the Paul-principle.

Although the administration has proven to be unable to any reform, the fleet is still powerful and possibly only rivalled by the Arabian, not counting Ulthuan of course.

The Empire

The Empire had a great tradition of navigation. Yet with the independence of Marienburg, it has lost most of it.

The few remains of this tradition can be found along the north coast of the Empire were a fleet of fishing boats leaves the harbours every day. Yet the Empire has little interest on the sea and is mostly a land power.

Much of the nautical history of the Empire therefore lies in Marienburg.

Estalia

Estalia is similar to Bretonnia in many ways. It had a long tradition of fishing before the kingdoms began to take shape. Contrary to Bretonnia however, the Estalian kingdoms were never able to combine their strength and are occupied with numerous smaller conflicts, especially between Bilbali and Magritta.

During the Arabian invasion, the invaders brought many of their ideas, which were left upon their defeat and helped make Estalian navigators amongst the best in the Old World. The Arabians have also brought the passion of the galley to Estalia and many Estalian battleships are either bireme or trireme.

Estalia is also home of many explorers that have ventured far south in the search for honour and (not so much) knowledge. Either Bilbali and Magritta are known to sponsor explorers

and it was only recently when Wilhelm Tore from Nuln was granted three ships in the search for a safe route to Cathay.

Unless the Estalian kingdoms and especially Bilbali and Magritta are able to reach an agreement and forget their age-old quarrel Estalia will be unable to play a more important role in navigation.

Kislev

Kislev is relatively new on the sea of the world. Fishing was and still is of great importance to the land, but Kislev has only a pretty small fleet.

Sea trade is mostly carried out by Marienburg, and Kislev, with limited access to the Sea of Claws, has little need of a large fleet.

Although the Tsar has begun to build up a fleet after the harbour of Erengard was renovated and expanded, the fleet still is of only little importance.

Marienburg

Marienburg is the personification of navigation. The city would be nothing than a village without ships and trade. The first ships of Marienburg were simple fishing boats, as they can be found along all coasts of the Old World. Yet in Marienburg the pragmatism and economical sense of its citizens have turned these fishing boats into the largest harbour with the largest trading fleet soon.

Marienburg is also home of many shipwrights and there is hardly a design that was not tested in the harbour before it made it step either into the Sea of Claws or on the ground of the Manannspoort Bay.

Marienburg has little tradition in nautical warfare since this was either done by the elves, with which Marienburg has a number of special agreements, or by mercenaries. Most of the money instead goes into the trading fleet.

The nautical tradition of the Wasteland, not including Marienburg, is sparse. Most of the

villages along the bay have been used by fishermen much longer than anyone can remember, and remain unchanged.

Norsca

Norsca has a rich and long tradition of navigation. The first king, at least the first whose name was not lost in time, Harøld Redbeard was a noted seamen and this means something among the Norscans. Whilst little more than a loose alliance of tribes and settlements, this nation is virtually dominated by navigation. This goes as far as to divide the settlements not into families, but into crews. Every crew and their relatives forms a group, much similar to a family, and the head of the crew, who is the captain or the eldest men, has power similar to the power of a lord in our realm.

Trade has always played an important role in Norscan history and the design of their longboats has proven to be capable to withstand most storms. On their search for new supplies, the Norscans were possibly the first to set a foot on the continent of Lustria and founded the colony of Skeggi.

Since trade was not always able to bring the desired supplies to Norsca, the people have also a long tradition of warfare, some would say piracy, and their longboats have been a sight of terror along all coasts of the Old World for more than a century.

Although Norscans are experienced and skilled sailors, Norsca was never able to become something as a maritime power. Mostly because the nation is still fragmented and more or less still based on the system of the ship as the smallest unit.

Tilea

The Tilean city states were founded on the remains of a much older civilisation. As far as we know, this civilisation was a maritime power of considerable strength. Yet with the

decline of this nation, the land between the Abasko and the Apuccini Mountains has lost most of its influence.

After Tilea fragmented into the various city states, these cities have begun to be more occupied with fighting each other than forming a nation. Therefore Tilea is no match for the Arabian fleets today.

After Tilea has lost most of its influence, most city states have begun with piracy, either by openly tolerating or actively supporting it. Today all Tilean city states can look back at a long tradition of piracy. This culminated in the founding of the pirate's state Sartosa, south of Luccini.

Dwarven Naval Culture

The dwarves are, together with the elves, the oldest races. They have dwelled in our world ever since our history begins. Yet they are different from humans and elves, since they have almost no naval history.

We do not know if the dwarves ever build ships of their own, but it seems as if they only use ships to sail on river and lakes. Some even seem to be afraid of the open sea. Many scholars take this as evidence of some incident in history that still frightens the dwarves, although they are unable to tell anything of such an incident and it is generally accepted that such an incident never took place and that the dwarves simply do not feel comfortable on the waves, so far away from their homelands.

Although the dwarves have not own naval history, they certainly had their influence on the naval history of the humans. Most notably the first weapons used on ships were modified versions of normal siege engines that were altered by the dwarves. Recent reports speak of attempts by the dwarves to build ships out of metal, but as any schoolboy can point out metal does not swim and such attempts are doomed right from the start.

Halfling Naval Culture

Halflings are known to build small boats, for use on river and lake, but they are definitely not renown for sailing the seas. In fact very few halflings have ever hired on a ship. The reason may be that they feel uncomfortable on a ship, much like the dwarves, and prefer to live in their homelands.

Thus the halflings do not have a history in navigation and the few that ever made their steps in the open water did so on human ships.

Other Races and Fractions

There are many other races in the Old World, some of them have enough intelligence to build crude and simple ships. We have nothing than a cursory knowledge of the naval history of these races.

Most notable of these races are the so called „greenskins“, that is the races of orcs, goblins and alike. This race, or should it be races, are known to have build ships since a long time, although none of their ships can match the beauty of even the most simple human ships. Their ships resemble an assortment of rubbish and trash that is somehow put together and made to swim. Although such ships can be

regarded as nothing but naval jokes, they are surprisingly sea-worthy and many attacks of this races was done with the help of ships.

Alas we know little about the chaos forces and their naval culture, if culture is the correct term for these foul servants of chaos. The few ships that we have seen so far were made entirely of metal, although metal cannot swim and strong magic forces must therefore propel the ships. They resemble swimming fortresses in many ways, often carrying hundreds of beastmen and chaos warriors and a wide assortment of weapons. Since such ships were rarely seen on the shores of the Old World we can assume and hope that the chaos forces have only build few ships.

The gnomes are in many ways similar to the dwarves and generally seem to share their dislike for the open sea. As far as we know the gnomes have not build ships of their own, instead they have done some work to improve the human designs and they seem to have great skills in organising and building new weapons and other equipment. Since they have not build their own ships, their impact on naval designs is not very big.

LIFE ON A SHIP

„Come on everyone, your one and only chance to see the wonders of the world. What about you sir, wouldn't you like to sail the waves on the mighty battleships of our beloved king. Think of the fame and fortune, the adventure and not to forget the women in these far away places. You are interested? Please come along.“

- last words a farmer from Bretonnia heard before finding himself west of Albion

Life on a ship has nothing to do with the romanticised picture that is known among the farmers of Ostland or the citizens of Middenheim. It is at least as hard as the life of any soldier, with the difference, that sailors cannot desert unless the ship is moored.

Daily Routine

The daily routine on a ship is strictly regulated and leaves no room for past-times. The boatswain enforces these strictures.

The daily routine differs considerably from sailing ships and rowing ships. Since sailing ships require less men to operate it and wind blows during the night, the crew is often broken into two or three shifts. The night shift in general has less men and the main task to follow the course of the day. Sails are rarely set or removed during the night, unless a storm gathers. The number of men and the number of beds determine the number of shifts. Two shifts are generally used, when there are twice as many men, as there are places to sleep, so that one part of the crew can sleep, while the other has to do service. With two shifts, the sailors get twelve hours of sleep before they have to do twelve hours of service, while with three shifts, every sailor gets sixteen hours of sleep before he has eight hours of service. Not surprisingly the three shifts pattern is preferred by the sailors and some crews even try to scare some of the younger sailors in order to reduce the number of men and thus increasing the men to bed rate.

On rowing ships, the night is generally the time of silence. Only a few guards and the lookout

are awake, while the oarsmen generally sleep. The ship often lowers the anchor before night and tries to find a bay or some other natural protection against wind and weather. Besides the men, that stand guard and the lookout, the crew is asleep and therefore rowing ships generally have only one shift.

Shifts are measured by an hourglass, that takes around half an hour to run out. Each time the hourglass is turned, the bell is chimed. Every morning at dawn is the first glass.

The shift that is not doing service is called the free watch. They are free to do whatever they want, although there is little to do on a ship other than sitting around, sleeping and gambling. Gambling is considered a crime on all navy ships and punished with ten strokes of the whip. The same applies to wrestling since wrestling can lead to injuries of valuable although expendable sailor.

Upon sailing ships, a shift is further broken down into teams. Each team is responsible for one mast. One or two further teams are responsible for other work on the ship (e.g. cargo, armaments), although each team is more or less able to work at any place.

Each team is headed by a mate, that stands right below the boatswain and ensures that the sails are set or put down. Every team is also responsible for the state of the ropes and the state of the sails. Often they also have to repair the sails, should they be broken.

Since only one shift is allowed to sleep, the sailors, with the exception of those fulfilling special tasks (like the navigator), share one bed with their counterpart of the other shift. Therefore the beds are always used, which does in no way add very much to a clean and healthy atmosphere. Instead the belly of a ship is crammed with men.

During a battle every sailor has to be on deck. On sailing ships, the battle sails are set, that allow a considerable speed with few men, therefore freeing men for fighting. On rowing

ships every oarsmen has to pull the oars to ensure an efficient attack speed.

Basically the same applies in bad weather. Although the crew does not have to be on board every crewmen has to be ready for any work.

Even the simplest peasants can wash themselves regularly. A sailor on the other hand is hardly allowed to jump into the sea, even if he wanted to.

Besides his counterpart, every sailor has to share his quarter with an almost infinite number of rats and other beasts, which torment him for the whole journey. Rumours persist, that some sailors were eaten alive, by rats, although these are disregarded as pure fiction by the admiralty, there may be a grain of wisdom in them.

A passenger on a ship may expect to get a much better treatment, than the normal crew. With the exception, that he does not have to share his bed, he suffers the same conditions; more than one merchant has found infections, were he only expected rest. The only way to obtain treatment resembling that of the captain is to pay two or more times the price of a passage.

Food

Food is important, as any person can tell. It is especially important for anyone, who has to do manual work. Therefore food is very important for sailors. On the other hand no one ever hired on to a ship to eat well.

The quality of the food can be everything from horrible to acceptable. It very much depends on the ship and the owner, how well the men are treated and how good the food is.

On a merchant's ship, the food is generally far better than on a military ship, and the food on a sailing ship is often better than the food on a rowing ship.

Merchants in general look much more after their men for various reason. The first is that

they want to get the ship and its cargo back into harbour. The second, and more important, is, that most of the merchant's ships are sailing ships and therefore the number of men is much lower than on a rowing ship. This makes food much cheaper, since fewer sailors have to be fed.

On the other hand, military ships, especially those from Tilea, do not pay much attention to the food and give the men just enough food that prevents a mutiny.

The normal diet of all sailors consists of salt beef and biscuits, although they are often served a grain porridge this is not called food even by the bravest sailors. Since all of the food is stored in barrels it is not uncommon, that the moist weather has taken its toll on it. Also much of the beef was salted long before the ship left the harbour and it is no secret that some ships have barrels that were filled thirty or more years before. The worst example of this was the Glorienschein, a small Imperial vessel, that left the harbour with meat, that was salted eighty-five years ago and was found out to be hard as stone. Most of the meat was used for carving rather than eating, and a few masterpieces of naval art were produced on the voyage of the Glorienschein. Even old salted beef is apparently still edible, though best boiled and grated with a nutmeg grater.

Although coastal vessels in theory have much better access to fresh supplies along their journeys, this does not mean, that the captain is willing to stop on his trip to add supplies or pay for it.

The only way to change the diet of salted beef, is to fish. Since the ship is surrounded by water this is a common practise among sailors. However a number of captains forbid their men to fish and think that this may lead to strange diseases, they could not be more wrong.

Even though the salt beef is nothing to look forward to, it is only served once or twice a week, while during the rest of the week the sailors are served a hot stew made from grain. This stew earned the nickname of Nurgle's Spit and the name speaks for itself.

The only exceptions to this rule, are some captains, that are able and willing to buy livestock, normally chickens, that is kept on deck and served during the first days of the journey.

The biscuits are made to last long, rather than taste good. Even when coming from the oven, they are pretty hard, but after a few weeks in a barrel, they can be used as missiles rather than dinner. The biggest problem with the biscuits is, that it lasts so well and often provides home for generations of weevils and maggots.

In fact, the sailors have an interesting tactic to get the maggots out of the biscuits. They fill a sack with the biscuits and then leave a fish on top of it, so that the maggots come out of the biscuits and infest the fish which could then be thrown away. Each sack needs a number of fish. As Filipe Guarvarex, a historian from Magritta, has pointed out, it is a pity, that nobody thinks of eating the fish.

The function of the cook may seem to be vague at last. In fact the only real function of him was to boil water and mix the ingredients. Cooking something on a ship has almost nothing to do with cooking in a tavern.

Even though the food is often disgusting, it rarely is injurious. The water on the other hand is often lethal. Water that was stored in barrels for a longer period often becomes the turf for a number of diseases. The Arabian ships are an exception to this, since it was Abdallah Ibn Hasim, an Arabian sorcerer and alchemist, that was able to develop a method to keep water fresh even over long periods. For this he summons a water elemental in a barrel of water. This water, which is then called God's Tear, is distributed among barrels, so that every barrel contains about half a pint of God's tear. If fresh water is then placed into such a barrel, it is kept fresh. Unfortunately Estalia, Bretonnia and the Empire have, in a rare behaviour of unity, banned this water was chaos work, although an Arabian merchant offered the knowledge to them.

Out of despair many sailors try to drink seawater, which often leads to insanity, or gather moist from the sails and planks in the morning.

When water is often bad, the alcohol is worse, it just seems better. As a substitute of water the sailors are given a mug of alcohol (either rum or schnapps) a day. It is considered to be a fundamental wisdom among the admiralty, that a sailor's life is so hard, that it is better to have the men at least partially drunk all the time. It is common and well established custom, that the crew of any ship is given a large quantity of alcohol before going into battle and many crews are roaring drunk. They are however able to fight quite well, since battle has a sobering effect and the mechanics of battle have been beaten into them so well, that they just do not have to think.

Punishment

„In the name of the crown and our beloved king I sentence you to receive one hundred strokes of the whip, delivered on the bare back, for falling asleep during watch. A further fifty strokes shall be delivered for questioning the decision of the boatswain. May the gods have mercy with your soul.“

A ship is a closed community and the captain has more or less absolute power over the sailors. Many captain abuse their power and punishment is often arbitrary.

To ensure the moral of the men and to prevent any mutiny, captains often choose to punish a sailors for even minimal offences. Of course frequent punishment is right the root, that may lead to a mutiny.

All sea-going nations have issued a codebook on crimes and their punishments. Most of the crimes lead to a death sentence, which is executed by either hanging or flogging. Flogging seems to be a favourite among admirals and captains and is frequently administered for an educational purpose. The instrument of punishment is called the „cat o’

nine tails“, a whip with nine strings. Often nails or thorns are woven into the strings to virtually rip the flesh from the bones of those unfortunate, that in any way stirred the attention of the captain.

Sailors are flogged quite often and even a wrong look may lead to long sessions of flogging.

Another form of punishment is keelhauling. During this punishment the unfortunate has a rope tied to his hands and his feet. He is then pulled under the ship. Although this seems to relatively harmless as long as you can hold your breath, it often leads to the death of the unfortunate. This is due to the number of molluscs and sea shells that sit on the hull and rips the flesh of the victim.

Walking the plank is now rarely used as a punishment and only pirates seem to administer this „punishment“ as a way to convince sailors to join their crews.

Sailors that keep causing trouble may in rare circumstance be abandoned on a deserted island, although this is hardly done since ships that sail near deserted islands can rarely forego a valuable sailor who may be needed in the next battle.

The boatswain is responsible for administering any sentence and many of the boatswain seem to enjoy flogging the men.

The sentence has to be decided by a tribunal of three, which consists of the captain, the first officer and the purser. In theory these three have to hear the case and then decide upon a verdict. In practise however the captain has command over the first officer and the purser and most captains simply order the sentence.

Superstition

„We are not superstitious, we just want to be save. You see, this anchor is a symbol for a safe journey, this scar is to give me bravery and this amulet keeps ghosts away. You should not laugh about it, you land rat.“

Sailors are known to be probably the most superstitious people in the world. The reason for this is that sailors are much more confronted with the dangers of nature and the gods, especially Manann.

Therefore many sailors follow certain pattern and use special signs to avoid bad luck. The most obvious form is of course praying to Manann. Even though very few ships have a priest of Manann on board, almost no ship leaves the harbour, before a priest has at least blessed the ship and its crew.

Secondly many sailors wear charms or tattoos, that should prevent bad luck. Most of the charms and tattoos depict ships, anchors or the names of the wives or sometimes the name of the sailor. The motives are legion and for many it has been forgotten what they originally meant. We know, that the anchor should represent stability and safety, while names symbolises, that the person named should not be forgotten and survive every danger.

Other forms of superstition are, that no man should ever kill dolphins, who are considered to be holy to Manann. The appearance of a raven, especially on the open sea, is considered to be a bad omen and that Morr is looking on the ship. Therefore ravens are often driven away. On the other hand, the albatross with its white feathers is considered to be a bird of good omen and often greeted and fed by the sailors, should it appear.

Something especially „holy“ to any seaman is the figurehead on front of the stern. This figurehead is also the ram on rowing ships, while it is generally made of wood on sailing ships. It is claimed to contain the „soul“ of the ship and that no ship should leave harbour without such a figurehead. As far as we know in ancient times, persons, especially women, were sacrificed and their heart enclosed into these figurehead. Fortunately these times are long gone, at least in the civilised world, and we no longer believe in such heresy. But still the figurehead has great importance for a ship and the damaging of the figurehead is seen as an omen of doom.

Another common believe of sailors is, that women on a ships bring bad luck. This rumour seems to be especially persistent among the sailors of Bretonnia and Estalia. It has, of course, never been proven and some of the finest captains in history have been women. However women are still often seen with mistrust. This generally is only true for women that are not sailors, that is harlots, courtesans or relatives or wives of the officers.

A more rational reason for this may be, that some officers and captains often bring their daughters and wives on board. When such people are on a ship it often means less food for the sailors, more fighting among the sailors and also that the captain is more interested in „private“ matters than in his ship. Therefore it is understandable, that many sailors prefer to sail without women.

Fire

The attitude of sailors towards fire is pretty obvious if you consider that all ships are built of wood and cloth and that wind is more or less constantly blowing. This combined with the fact that only a minimum of sailors can swim makes it clear that fire is amongst the most feared things on a ship.

To prevent setting the ship on fire, all flinstones, candles, lanterns or other possible

source of fire are kept by the purser and the crew generally has no access to fire.

The only exception to this is the cook, who is allowed to keep a fire in the kitchen. Yet the kitchen is often far away from the rest of the ship and especially the powder storage and generally put in the stern of the ship.

Anyone toying around with fire is guaranteed to be thrown in the water or probably worse.

Magic

Seamen have a pretty simple attitude towards anything magical: they hate it. Most of them come from rural areas and/or from the lower class, thus they share the general opinion of such people.

They do consider magic as something heretical and dangerous. Although every ship is more than happy to have a wizard on board either for battle or healing, it also means that in the former case the ship will draw enemy fire.

Wizards are treated with a great amount of respect. Every seamen except for the officers will try to avoid them for fearing of the Evil Look or something similar and many rumours exist that tell that a wizard can look right into the heart of men, to places the seamen often would prefer to remain secret.

DANGERS OF THE SEA

„It was on the twelfth day of our journey. The crew was a merry bunch of guys and the wind was on our side. Our ship was rolling gently in the sea and we have trained in the use of our weapons during the last days. The boatswain was, as always, a little too enthusiastic to please the captain, but that is just the way it is.

We were expecting to reach Remas in three days and everyone was eager to spend his money in the next tavern or whorehouse.

As we were sailing over the clear blue sea, the wind hanging in our sails, we saw a whirlpool one hundred metres in front. Normally whirlpools can be found nearly everywhere and they are no danger to ship. Yet in this case, the whirlpool looked different. I cannot say what exactly looked different, but surely something was wrong. The officers were arguing and I could see the fear in their eyes. The mates and the boatswain were silent and just stared at this whirlpool. Suddenly we dropped into a calm and after a few metres it virtually stopped on the sea. The whirlpool was still present, yet it was too small to do anything, than divert our course.

Our ship slowly moved to the whirlpool and as it stood right above, it began to turn slowly. But that was nothing extraordinary. Then suddenly something seem to have attached to the hull and began to pull the ship below. The crew was horrified and tried to use the few oars that we had to get the ship out of it. I and three of my fellow crewmen jumped into the lifeboat and began to row as fast as possible. After the ship was ten or twenty metres behind us, we turned and saw, that the whole ship, a carrack of twenty metres, was sucked into the sea. We just stood and watched. No one of the crew appeared on the surface, only a few planks floated upwards. I swear that this is true and after we were picked up by an Estalian galley and brought to Magritta I have sworn never to put a foot on a ship again.

Four big seas surround the Old World: The Great Western Ocean, the Middle Sea, the Sea of Claws and the Southern Sea. The seaman can travel on these seas for weeks without ever seeing land. These seas are the domain of Manann, who rules over the waves and the wind.

The Great Western Ocean is the most

mysterious of all seas. Although many have tried, few have succeeded in crossing it and brought stories of wondrous lands back into their harbour. Many dangers await the one, who is brave enough to enter this endless realm of water and wind and sea monsters are not the most dangerous. On the Great Western Ocean the wind is almost permanently blowing from the south-west. Along with this wind moves the stream, that brings rich harvest to the fishermen of Brettonoa and Estalia, who call it Manann's Gift.

The Middle Sea is possibly the safest water of the Old World. It is relatively free of storms, monsters and pirates. It is protected from the winds of the Great Western Ocean by the peninsula of L'Anguille. The Middle Sea is dominated by the ships from Marienburg, which venture as far as Cathay. Here the wind also blows from south-west, although it is much calmer, than on the Great Western Ocean and the seamen refer to it as Manann's Kiss.

The Sea of Claws is a sea of contrast. During winter and autumn the sea is the place of battle between Manann and Ulric, in which the waves are topped with white crest. During the summer the Sea of Claws is almost idyllic as the merchants come from Erengard to transport the fur, that was collected during the long winter. The Sea of Claws is also one of the few seas, that partly freezes during Ulrics reign. Especially the harbour of Erengard often suffers from icebergs. The sea of Claws is also home of the longboats, that cross it on the search for fish or ships.

The Southern Sea is possibly the most dangerous sea. This is caused by its unpredictable currents, as well as by the pirates that torment this region. For many ships the trading line ends in Magritta, with only few vessels venturing further into the east. Even ships called for Cathay rather risk to sail into the Great Western Ocean, than sail along the coast of Tilea, the Border Princes and Araby. The Southern Sea is also place of the most famous battles, mostly between Araby and Estalia. The winds on the Southern Sea are on the other hand rather calm and the dangers of these waters are man-made.

Besides these four big seas, the Old World has a much stranger sea on its southern side: The Black Gulf. Lying between the Border Princes and the Badlands, this sea rarely sees trading ships. There are only a few cities and harbours that even deserve to be visited. The Black Gulf got its name from the dark colour of the water and is a relatively quite sea. During the summer winds are rare and legends tell us of ships, that were stranded right in the middle of the sea without any wind.

There are many different dangers on the seas of the world. Most of them are nothing than fate, while others are man-made. The best protection against these dangers is an insurance. These insurance were „invented“ by Francesco del Buenes of Luccini and House Fooger of Marienburg has made its fame and fortune with them.

Coasts and Beaches

The most famous coast is possibly the north coast of the Tilean Sea. One reason for this is of course the existence of Skavenblight. Another reason is, that the coast along Tilea has many shallows, which have possibly caused more deaths, than even the fiercest battle. Another feature of the Tilean Sea are the numerous beach pirates. Especially along Fools Point whole villages seem to be occupied with wrecking ships by setting false lightfires.

The southern coast of Estalia is relatively safe, only a few steep cliffs prevent safe landing. However the tides of the Southern Sea can be tricky and captains have found their ship thrown onto the coast during night. The coast offers little protection from the storms that eventually rage the Southern Sea. The coast can be sailed by most ships, since it has only few shallows.

The northern coast of Estalia is a different game. Here the winds of the Great Western Ocean and the numerous cliffs and shallows make navigation quite difficult. Only east of Bilbali is a relatively safe coast, that protects the beaches from the most vicious winds.

The coast of Bretonnia is a relative safe place, with the exception of the peninsula of L'Anguille, that is windswept and filled with sandbanks. This coast is also free of pirates, since the Bretonnian fleet situated in Bordelaux and L'Anguille tries its best to keep it free. This together has made the coast of Bretonnia a place of trading, with many cities and harbours.

The coast of the Wastelands is possibly the safest in the whole of the Old World. The council of Marienburg employs many pilots, that lead the ships, through the shallows of the Middle Sea. Many lighthouses are along the coasts, that itself is pretty shallow and warn ships of any dangers. Since parts of the Wastelands are below sea-level, the coast is very shallow and an inexperienced captain without a pilot can easily wreck his ship here.

The coast of the Empire is pretty uninteresting to merchants. Only small villages and towns are placed along its shore. Other parts of the coast are a seemingly endless forest. The most dangerous feature of this coast, is its tides, that can be as much as three metres. The coast is a long beach, that tells of the shallows and sandbanks, that await the foolish captain.

The coast north of Erengard is often cloaked in mist, which makes travelling pretty dangerous. The coast itself is ridden with bays and cliffs, the former providing a safe place for ships. The tides are even stronger here than on the coast of the Empire.

Along the Black Gulf is a hostile coast, that mostly consists of cliffs. Together with the strange winds, the Black Gulf can turn out to be a dangerous place.

Ice

Often called the frozen rage of Manann, ice is a danger to every ship. It is common in the Sea of Claws during the winter, but can also appear much earlier in the year, normally in the form of icebergs.

During the summer the coast of the Northern Wastes and Norsca are free of ice and the traveller has to wander for weeks into the land to find the first snow. During the winter, when

Ulric begins to conquer parts of his brother's realm, many harbours can no longer be reached and the few ships that are still moored are often crashed by the ice. The annals of Marienburg speak of a winter about two hundred years ago, when Norscan warriors could cross the distance between their homeland to Marienburg on foot. What the reason for this strong winter might have been remains a mystery, but afterwards the merchants in Marienburg have begun to make sacrifices to Ulric before the winter starts in the hope to prevent such a fate.

Tides

The tides are, as any child can point out, caused by Mannslieb. However the reason for the movement of the sea is in secret. The cult of Manann tells of an event shortly after the first humans have set their foot on the world. In this time was a child born, a girl by the name of Natascha. When Manann saw her face, he immediately fell in love with her. However these times were dominated by warfare and the village of Natascha was raided and she was slain. Manann saw her death, but could not intervene. After she has drawn her last breath the raven of Morr appeared and wanted to claim her soul. However Manann refused to let Morr have her soul. After the gods debated for ten years, Morr agreed to spare Natascha's soul from his dark realm and place her among the living creatures. Since Morr could not allow a dead person to live again, he took her soul into the moon. Now, every day, when the moon crosses the sky, Manann stretches to kiss her, however he can never reach her. The moon is therefore called Mannslieb.

No matter if this legend is true or not, the tides seem to correspond to the movement of Mannslieb. The interval between the highest and the lowest tide is a little less than seven hours, so that every phase of Mannslieb has the same tide. On most coasts, the difference between the tides is about one metre, with the exception of the Sea of Claws where the difference can be up to three metres. Normally ships leave the harbour with the flood, to avoid sailing or rowing against it.

The most feared tides are the so called spring tides. These tides take place around every second month. A spring tide always takes place on the Mitterfruhl, the spring equinox. During a spring tide the sea can rise up to six metres and many coasts are flooded.

Maelstrom

Small whirlpools are common on almost all coasts. They are generally no danger to ships and only have some influence on the course.

There are however two places where Maelstroms exist, that can suck even the largest ships into the depth.

About two days south of Magritta, between the Old World and Araby is a major maelstrom, which appears every year in spring and can remain until autumn. Since this maelstrom is in more or less always in the same place ships are able to avoid it. It however has influence on the course of any ship, that travels south of Magritta. The biggest danger is, that a ship may lose its course and steer into it.

The second known maelstrom is east of Albion. It appears irregularly and is thus feared among the few, that travel in these waters.

Chaos Flux

Records exist of chaos fluxes in the northern sea. We have no knowledge, if these are true or simply legend. What we know is that ships disappear without any notice and in calm weather. However this could also be the result of attacks or other much more worldly events.

We know for sure that if such chaos fluxes exist, they are rare and never near the coasts of the Old World. Research done by wizards from Middenheim and Marienburg has led to no satisfying answers and the results were that chaos fluxes could be quite common during the cataclysm.

From the few records that exist we can learn that a chaos flux has the appearance of a bad weather front. While the winds begin to gather, lightning begins. After the ship was caught in such a storm for a few minutes, enough to crash

most ships, the storm seems to have come to an end and the ship is caught in a calm sea. However this period of peace is not lasting very long, before the water itself begins to build up, often rising to a hundred metres and more, before it crashes down. Mysteriously the air is still calm. While the water begins to „stretch“ towards the sky, the ground of the ocean is visible for a few seconds. Not none ship has survived such a chaos flux and not more than a handful of sailors have survived. The few that did survive, began to show the marks the chaos soon afterwards.

Whatever the truth may be, a chaos flux is able to destroy every ship, no matter what size, and not even the most powerful wizards seem to be able to prevent them.

Running Aground

One of the worst things that can happen to a ship, is to run aground. However it happens surprisingly often.

Running aground has two negative effects: The hull takes damage and the ship is immobile until pulled free.

The damage very much depends on the ground. While sand shallows do only little damage, running aground on a reef often completely destroys the ships. The amount of damage should be between 3 and 50 W, depending on the ground.

To get the ship free again can be a difficult business. The easiest form is of course to wait for the high tide, taken that the current waters do have tides. Another way is to scull the ship free, either by oars or by a dinghy. The third way is to kedge the ship, that is to bring the anchor out by a dinghy and use the winch in order to pull the ship with the winch.

While in combat, a ship that has run aground is considered to be a prone target, although it may be difficult to board except for ships with less draught.

Mutiny

Mutiny is not so much a danger of the sea, since it is created by the ship itself and not the sea. However it is a major problem on many ships. The reason why mutinies are much more common on ships, than on land, is that on land soldiers have the chance to desert their unit, while the sailors on a ship hardly have such a choice.

We know of many records on mutiny, the reason are too long to name here, but it seems that poor food and abuse from the officers are the main ones.

The most widely know mutiny took place around a hundred years ago, on a ship called Prodigalita, that sailed under the command of Gnaeci Florenci south of Araby. It was a regular patrol ship to seek Arabian pirates. After the ship failed to find a pirate for four months and the supplies ran out, the crew got more hostile, while Florenci seemed to get more violent towards his men. A mutiny broke out and was successful. The mutinous sailors were able to defeat Florenci and his officers and later put them on a small island, where they were picked up half a year later. The mutinous sailors were never captured and the Prodigalita never seen again, at least not on the shores of the Old World.

Mutiny is a crime and is always punished with death. Even the conspiracy to a mutiny to considered to be a capital crime. Generally the mutinous sailors are hanged on the highest yard until the flesh begins to fall from the bones.

As a reaction to numerous mutinies in the past, the navies have begun to give every ship a small group of soldiers or marines. These are to protect the ship and its officers against any mutiny.

Although mutinies can break out on almost any ship, they are much more common among sailors, who were pressed and did not volunteer. Since the practise to draw (or press) sailors violently is known as to shanghai,

deriving from the riots in Schangheim, a small town near Middenheim, which broke out among the women of the town after all men were drawn. It is quite common practise, but leads to greater unrest among the sailors onboard, and can turn into a mutiny quite easily.

It is often easy to see when the crew is on the brink of starting a mutiny. The most obvious hints are general unrest and that sailors begin to argue silently in small groups. Many sailors begin to roll cannon balls or catapults missiles over the deck during the night. Every seamen that witnessed a mutiny will certainly remember the sound of the balls as the move with the rocking and rolling ship. There are two reasons why the sailors do this: This first is as a kind of warning to treat them better and improve the conditions. The second reason is that they hope to break the legs of an officers who walks over the deck during the night.

Monsters

(for statistics see Appendix F)

Many monsters are rumoured to lurk in the dark depths of the sea. Many pose no threat to a fully equipped and manned warships, but can be dangerous to smaller coastal vessels, that venture too far into the open sea.

Many of the legends can be considered to be wrong, however a number of monsters seem to live in the open sea, that are more than capable of destroying a whole fleet.

Giant Turtles

Turtles are quite common animals along the southern coasts and some have even been seen far out in the ocean. None of these are any threat to a ship, although some can cut of the finger of a careless fisherman.

There are however reports of gigantic turtles, that live far away in the ocean. The reports are rare and the few that we have tell, that they are found far in the north, were the icebergs float. Since Giant Turtles have rarely been seen, we

do not know of the living circumstances of these creature. What we do know, mostly from the research of Vladimir Kirowskow, who unfortunately drowned in his bathtub before he could go on his next expedition, is, that Giant Turtles are harmless unless they are attacked. They mostly seem to feed on fish and other smaller sea creatures.

Growing to a circumference of 10 metres, the largest were reported to be as big as 25 metres, the Giant Turtle often has a blue to brown shelf. The few reports of a Giant Turtle attacking a ship come from Norscan Sailors. These reports show, that a Giant Turtle seems to be able to crush a longboat with its jaws.

The origin of these creatures is unknown and the many tales of chaos sorcery or the development during the cataclysm in no way have enlightened the knowledge of them.

Giant Turtles should not be mistaken for Dragon Turtles, although both species share many similarities.

Giant Octopus

Giant Octopuses and Giant Squids seem to be mutations of the ordinary octopus and squid, although this mutation may not have any connection with sorcery.



Both species can be found along the coasts of the Southlands and Araby, were they seem to float just beneath the surface quite often. Arabian seamen often tell tales of octopuses and squids growing as large as 15 metres, with tentacle up to 20 metres and a black hide. Both species seem to have gigantic jaws located at the root of the tentacles.

They seem to be very territorial often attacking anything, living or dead, that comes into their territory.

How much of the Arabian tales are true is unknown and so far no reports have been made by righteous Old Worlde seamen, at least

none, that cannot be traced to the consumption of alcohol. What should however worry us, is the finding of a single tentacle at the coast of Bretonnia, that was 31 metres long and armed with suckers the size of a melon.

Some scholars claim, that the Giant Octopus is directly related to the Bog Octopus, although the evidence is scarce on this subject.

Sea Drake

Fortunately the Sea Drake was never seen along the coast of the Old World, however it has its place in Elven history. Thus our knowledge is much based on Elven history and no scholar can claim to have ever seen a sea drake or its traces. Even the reports of the elves are more than a thousand years old and this species may well be extinct.

Sea Drakes seem to be creatures, much similar to Land Dragons, with the exception that they prefer to live in or around water. As far as the legends go, they cannot breath underwater and instead dive into the water, were they may have caves filled with air.

Should Sea Drakes still exist, they pose a threat to any ship. They seem to prefer to attack from below the waves, were they either propel



themselves through the hull of a ship or by pushing the ship over. Since they also seem to be capable of flying, they also attack from above, setting the ship on fire with their breath.

Elven history speaks of two different kinds of Sea Dragons. The one kind are very similar to land dragons, with wings and all other characteristics. These could also be „normal“ dragons that just prefer to live near water. However there are legends about a different kind, that looks more like a gigantic snake. Neither has ever been seen by a sailor of the Old World as far as we know.

Sea Snake

Various snakes are known to live along the coastlines. Although there are legends of gigantic sea snakes, that measure a hundred metres and more, these can be regarded as fiction of some people from Albion. Instead there is a much more real danger: sea snakes. These are snakes, that resemble normal land snakes, but live in the water.

The beasts cannot attack a ship, but someone who was careless enough to fall from a ship can encounter them. We also know of sea snakes, that somehow have crawled on a ship and lurked in the cargo room, feeding on the various mice and rats.

All sea snakes seem to have in common, that they are very poisonous. The most poisonous of all is often called sapphire snake, due to its green skin.

The class of sea snakes contains almost as many different types as the class of land snake.

Sirens

The Siren is probably the strangest sea creature. Its origins are unknown, but it may in some ways be similar to a ghost, that is trapped to a certain cliffs. Yet we cannot say if they can be classified as undead, the two monsters share many similarities. Some wizards would agree, that Sirens are the victims of beach-pirates or the souls of others, who have died a violent death, while others claim that sirens are the souls of women who died mourning their lost husbands. A third group of scholars has recently come up with the idea, that the Sirens may in fact be the ghost of a long lost civilisation that disappeared a long time ago.

If this is true, and many believe it to be true, it is even stranger, that sirens almost always appear as women, while everyone knows, that women are only rarely seamen, hence the name seaMEN. Women seem to be unaffected by sirens and their singing.

Sirens have long existed only in legend, but recent expeditions and reports show, that they really exist. They seem to be quite aggressive, compared to ghosts, they do not seem to

interested to see a quest accomplished or a person punished. Instead they can be seen to sit on small rocks or islands and entrap sailors with their singing. That they feed on their victims or not is unknown.

Shark

Sharks are well known creatures and generally are not a threat to ships. However there are numerous reports of sharks attacking small rowing boats.

Sharks are pretty aggressive, although there are a number of types, that are too small to attack a human or elf (dwarves and halflings may not be so safe). Among the most dangerous is the so called Giant Shark, also called Death Shark, that is more than five metres long and capable to sink small vessels.

Although dangerous, sharks often try to ignore or escape ships and humans. As far as we know only few sharks attack a boat, when they are not themselves attacked.

Fortunately sharks are very rare in the Old World, at least the bigger and more dangerous sharks. Only rarely is such a beast seen on the coast of Estalia or Tilea and it was never seen on the Brettonian coast or further north.

Water Zombies

Water Zombies were rarely encountered in history, but there are some records of encounters. They do not seem to differ very much from „ordinary“ zombies, except that they appear on the oceans, rather than near graveyards.

They seem to be the victims of sunken ships, especially of ships that were in any destroyed by magic. This must have animated the corpses since we have no records that a necromancer ever animated them.

Water Zombies are similar in their physique to ordinary zombies, but they all share the bloated appearance of a drowned corpse.

When attacking water zombies emerge from the water and begin to climb the sides of the ship.

They will try to enter the ship wherever possible (e.g. the holes used for oars).

Whale

Whales are a common sight in the Great Western Ocean. They are immense creatures, measuring up to 20 metres and even more. There are also smaller specimens not longer than three metres. All of these specimens are relatively harmless and most of the deaths caused by whales were done while a ship tried to catch a whale and the whale has drawn the ship into the sea.

The only exception to this is the Karachlog, a large whale that roams the coasts of Albion and the Great Western Ocean. As far as we know, this is the only type of whale that actively attacks ships, especially when young are present. It attacks the ships by ramming and only larger ships are able to withstand such an attack relatively unharmed.

Besides the Karachlog, the whale is quite harmless and is often used by the Norscan as food.

Demon Whale

We do not know if this is a species, a subclass of whale or just a single entity. In any way we know, that the Demon Whale is probably the most feared monster in the sea. It is reported to be around thirty metres long with a snow white hide and long sharp teeth.

It is one of the few sea creatures that are known not only to actively attack ships, but also search for ships. Fortunately it was never seen in the Sea of Claws or the Middle Sea, but any ship, that steers eastward into the Great Western Ocean must be prepared to encounter this whale.

We know almost nothing except for the above about this monster. Although we name it Demon Whale, we do not know if it really was created or is possessed by a demon.

The Demon Whale, should it be a single entity and not a species, which we hope it is not, must have existed for more than two hundred years.

Because it was 213 years ago, that a Tilean captain by the name of Marcus Formicolla set sail to fight this monster. Unfortunately the ship never made it out of the harbour of Miragliano as it struck the walls of the harbour and Marcello drowned.

Undead

Unfortunately undead are much more common, than we can hope them to be. Many scholars have already written long and extensive treatise on undead. Therefore here shall only be discussed a special form of undead, that is unique to the sea: The Ghost Ships.

Ghost Ships can be mainly found in areas where many ships have been destroyed by storm or battle. They are however extremely rare and no more than three or four of these ships have been sighted, although these ships have been sighted quite often.

They are crewed with a number of undead creatures, often different undeads and of different power. They are spectral beings, although they do not seem to be subject to instability.

A Ghost Ship is often a small ship, which is much older than the ships that are presently used. They are often the remains of the sea battles, that were fought long before our time. All of them show the signs of damage, like broken masts, burned sails, damaged oars, however they move as swiftly and often swifter, than their real counterparts. Strangely the ships always seem to becalmed and their sails do not move at all, even in the greatest storm. Once they come within sight of another vessels, they will close at a constant speed, even against the wind.

Ghost Ships are often „commanded“ by a Wight or a Wraith. Fortunately the crew of a Ghost Ship is much less than the standard crew for such a vessel.

The most famous ghost ship of all time is the Sjal-slukka, although we do not know if this is her real name. The Sjal-slukka is frequently seen in the Sea of Claws and the Middle Sea.

Apparently it is what is left of a Norscan longboat. Norscan history speaks of this boat for over five hundred years, but no traces have been left concerning the reason of their sinking or their original mission. It is crewed with thirty zombie-like creatures under the command of what scholars have identified as a wraith. Strangely either the zombies and the wraith seem to have intelligence although it is a crude and simple form of intelligence. Contrary to other ghost ships, the Sjal-slukka is not particularly hostile. It is often seen to pass other ships without any attempt to attack, while some ships are attacked. The reason for this lies in mystery and unless we have found out more of the Sjal-slukka I doubt, that we can interpret her behaviour.

Diseases

(The roleplaying effects of the diseases can be found in Appendix G)

Possibly more lethal than any ballista or sword are the numerous diseases that can affect a person. The number of diseases are almost endless and many have been discussed elsewhere. Therefore here shall only be a number of diseases that are typical for ships.

Some of them, especially scurvy, have destroyed fleets, before they could even approach the enemy and their danger should not be underestimated.

Dropsy

A common disease among sailors is called Dropsy. Where the name comes from is unknown, but even ancient records speak of a similar or the same disease.

The reason for this disease is seen in the change from the land into the water. Newer theories on the other hand point to the fact, that it may be Manann himself who causes dropsy by wanting to put his rival Ulric out of the body. This latter theory is supported by the fact, that people who live on the coast are only rarely affected by dropsy, maybe because they already are near the realm of Manann, while people from the

inland of the Old World are much more affected.

The symptoms for this disease are a swelling of the skin, especially in the armpits and around the belly. The skin often has a doughy feeling and can be pushed with leaving a crater. The disease is generally not lethal and disappears after a few day away from the sea, if not before.

Although the disease is quite harmless it gives the patient an uneasy feeling and is therefore treated. The most common treatment are to bandage the patient and place him in a hot room, often the ship's kitchen. By excessive sweating, the water is put out of the body.

Heatstroke

Heatstroke is also not really a disease, but resembles more an injury. It is especially common among passengers, the sailors seem to be accustomed to it, that visit the southern parts of the world. It is not an exclusive aquatic disease, instead it is even more common among people, that travel Araby or the Southlands, were mysteriously the local inhabitants seem to be immune to it.

Heatstroke can appear in two varieties. The first is dominated by headaches, sickness and cramps. The second form is dominated by unconsciousness and difficulty in breathing. Both forms are difficult to distinguish, but since they can be treated in the same way it is not really necessary to distinguish the. Both forms are lethal, if the patient does not receive treatment.

The reasons for this disease are unknown. The most recent theories say, that it is caused by the foul air in the Southlands and Araby, that itself is caused by the worshipping of chaos gods. The treatment advised by these scholars is to cover the mouth and the nose with wet cloth, that should prevent the inhaling of the foul gases. Besides this, they argue, that great amounts of water blessed by a priest of Manann or Shallya should be drank frequently to continuously purify the intestines. As far as we know both methods seem to be useful, however heatstrokes are still common, especially among those, that are not used to heat in these areas.

Malnutrition

Malnutrition is probably the best researched disease. In fact it is not really a disease, instead it is just a general state of the body.

Malnutrition is common on ships, that have not been into harbour for long to add supplies. Therefore ships that have lost their course and ships on expedition are those that are afflicted the most.

The symptoms of malnutrition are a general weakness of the person, often together with a bulging of the belly. Unless the sailor continues to suffer from malnutrition it is not lethal.

The method for treatment are obvious, although hardly followed. Most physicians agree, that every ship should carry supplies for at least twice the normal time and that the supplies should include as much fresh meat, preferably from chicken, which are easy to keep on a ship, as possible as well as fat and sugar. Unfortunately most captains try to reduce costs and the sailors have to live from dried meat and old biscuits.

Scurvy

Scurvy, called Scharbock in the Empire and Marienburg, is possibly the strangest disease that we know, that can appear on a ship. It is quite common on ships, that sail months without access to land. This has lead to the theory, that scurvy is a disease, that is caused by the body's longing for land. This theory is supported by the fact, that elves do not seem to suffer from scurvy, possibly because their race is much more closely related to the sea, while dwarves are often the first to get scurvy, should they ever put a foot on a ship, since they are much more closely connected to the land.

The typical symptoms for scurvy are general weakness and lack of appetite. The next stage are frequent infections, pale skin, pain in the joints and bleeding of the gums. The final stage is the loss of teeth, the development of boils and sore in the gums and an infection of the lungs. Scurvy is often lethal, should it not be treated.

Various treatments have been developed for scurvy, however none has proven to work all the time. The most common treatment is to feed earth to the patient, since scurvy is caused by the body's longing for land, the physicians often try to bring earth directly into the body. As many scholars claim, the only effective type of earth, is the only from the hometown of the sailor, unfortunately ships can hardly carry earth from the hometowns of every sailor.

Lunacy

Not a disease in the strict sense of the word, it is however a problem, that is quite common on ships of every nation. A recent survey by Charles Nòelle from Bordelaux has shown, that the percentage of lunatics among the sailors is more than three time that of „ordinary“ people.

We do not know what the exact reason for it is, but at least the Brettonian admiralty was forced to build two homes for their lunatic sailors.

At least three theories exist, that give a reason for this high percentage of lunatics. The first reads, that influence of Morrslieb is much stronger on the sea, than on land.

The second seems to be more reasonable and claims that the consumption of large amounts of alcohol wrecks the soul of the sailors. The third is the least likely; it says that the cause is that sailors hit their heads so often on the low beams below decks. This last theory is course wrong, since everyone knows, that the soul does not sit in the head, but in the heart and that lunacy is definitely an illness of the soul.

RELIGION

For we shall honour your name and respect your realm. Allow us to cross your domain unharmed and that never a danger shall happen to us. For that do we pray, for you are the master and we are unworthy.

- prayer to Manann before leaving Marienburg

The dominant deity of the sea is of course Manann. He is worship by almost any sailor and seamen (refer to WHFRP page 196). Yet he is not the only deity, that is worshipped among sailors.

Although seamen are a superstitious lot everyone would be surprised to see them act, when on land. See how a group of shivering men, endlessly praying a week ago, instantly turns into a roaring drunken mob, cursing all gods and everything with them, when he puts a foot on the ground.

Of course every seamen believes in Manann and yet he hardly is a devout follower.

Praying

Most ships do not have the room to carry a cleric of Manann or of any other god, thus the service is generally conducted by a lay-priest. Normally service is held every second Festtag, but since no one is really keep track of the days the intervals change frequently.

The second difference to temples on land is, that a ship has not enough room to have a room solely devoted to a deity. Thus service is held at deck, often in front of a plank that is inscribed with symbols seamen regard as especially holy. Interestingly most sailors seem to think that carvings of naked women are very holy to Manann.

To think that all sailors are heretics or anything like that would be wrong. They are praying a lot and believe in the gods, yet they do it in their own unique way.

Religion is also an important aspect of every ship and its crew. It all begins with the building

of a ship. During the process clerics are regularly present, of course only when the future owner has donated some money to the local temple. Depending on the amount donated, the clerics sometimes even bless every single plank of the ship. In all cases it is expected that a cleric of Manann is present, when the hull is put into the water for the first time and when it finally leaves the shipyards. There are a lot of sailors that, although rarely visiting the temple, would not hire on a ship, that was not blessed in this way.

Explaining the behaviour of sailors on land is a little bit more difficult. Most would tell that they have preached to Manann enough while on sea, while others will point out, that Manann is the god of the sea and not the god of the beaches. In any way, sailors often „forget“ to visit the local temples regularly when they are in harbour and prefer to spend their time and money in the local taverns and whorehouses.

An important role during the day of every seamen plays the figurehead. No matter what it depicts, it is almost treated like a deity. Some have compared the meaning of the figurehead to the meaning a flag has for a soldier. Such comparisons are not wholly wrong.

The figurehead represents the ship and its crew. It is rumoured to contain the soul of the ship. A legend, although hardly believed by everyone, that has its influence, since any destruction or damage of the figurehead is seen as a bad omen and crews are known to exist that have abandoned the ship in the moment the figurehead was destroyed.

The figurehead is never called by a name. Instead it is always referred to as „her“, no matter if it really depicts a woman. Of every glass of alcohol that a sailor gets, a thimbleful is given to the figurehead.

Hændryk

Hændryk is the god of trade and commerce (Marienburg page 141). It is frequently worshipped on merchant ships.

He is somewhat of a mysterious deity and not even the priests can give a detailed history of his origin and connection to the other gods. He is rarely worshipped on battleships, but there are some instances known, where even soldiers have prayed to him.

Hændryk, although closely connected with the sea-trade, is not an especially sea god. Instead he is worshipped for profit rather than for a safe journey and good weather.

Hændryk is of neutral alignment and his symbol is a gold disk, representing a coin.

Stromfels

Stromfels, the god of the raging sea, is somewhat of an unpopular deity among sailors. He represents the dangers of the sea, the storm, shallows, maelstroms and pirates and no sailor is particular interested in any of these. Although disapproved, Stromfels is not really forbidden on most ships. Instead the individual worshipper is seen with deep mistrust. On the other hand almost any sailor has prayed to Stromfels once or twice, often before battle they are praying for havoc brought over the enemy's ships.

What the origin of Stromfels is remains a mystery. Some see him as an aspect of Manann, while others think of him as a Norscan god that represents Manann and Ulric in one. A third group of scholars sees him as an aquatic aspect of Khorne.

Stromfels is often worshipped by pirates and wreckers and this may also be a reason why elves attack any ship that shows the symbols of Stromfels.

Whole ships dedicated to Stromfels are a rarity. They may exist, but are not seen along the coasts of the Old World and even the men and women of Norsca would treat such a ship with mistrust. Cynics say that the reason is another on: Since Stromfels requires regular human sacrifices most ships lose their whole crew during a trip and are unable to return.

Stromfels is of neutral alignment and his symbol is the shark or a blood-dripping trident.

Ulric

Ulric is the god of winter and battle. He represents the raging and vicious battles while Myrmidia represent chivalrous fighting.

Ulric is immensely popular throughout the north of the Old World, especially in Middenheim and Norsca. The main reason for that may be that it is quite easy to be a follower of Ulric, because his strictures do hardly affect the daily life.

Among the Norscan sailors Ulric has almost taken the place of Manann and the blessing of a ship is often done by an Ulrican priest rather than those of Manann.

Ulric is frequently worshipped during the winter, when his domain moves to the south, and before battle. Except for war-longboats ships dedicated wholly to Ulric are rare.

Ulric is also often worshipped by pirates. But this worship is often somewhat distorted since Ulric forbids trickery and pirates rely on them.

Since the Norscans raided the coasts of the whole Old World, ships with the sign of Ulric are generally treated with suspicion.

Ulric is of neutral alignment and his symbol is the white wolf.

Ragorthan

Ragorthan is not so much a deity, as a patroness. When the worshipping of Ragorthan began is unknown. Even the origin of this patroness is mostly a mystery. It may originate from a woman, that once was a sailor, but all research done on this subject is nothing more than a guess, sometimes not even an educated guess.

Ragorthan is depicted as a female sailor with long blonde hair and deep blue eyes. She is frequently worshipped among female sailors, as well as among the wives and daughter that are left home.

Not so much a deity, she is more a focus for the hope to return. Besides this, she also represents the female side of navigation and naval warfare, although after a fight no one from the dead could explain a difference between a strike by a man and a strike by a woman.

Ragorthan is of neutral alignment and her symbol is a blue crown.

Klabaster

Klabaster is also not really a deity. Instead he is seen as the king of the ship's kobolds.

As any sailor can tell, things seem to get lost frequently on a ship and may or may not reappear later somewhere else. It can not just be bad luck that a sailor falls from the rigging or breaks an oar. For all these daily events the ship's kobolds are responsible.

Although no one has ever seen one of these creatures they are rumoured to be no taller than ten centimetres with green skin and green hair.

Every ship is said to have its own kobold. Although generally nothing more than a nuisance, they can get pretty nasty when angered by changing the ship's course overnight or influencing the compass. On the other hand, they also can be helpful by preventing the ship to take water or avoiding rocks and shallows.

Klabaster is said to be the king of these kobolds and most crews will place a bowl of alcohol and some grain in a dish during the night to please him. Often the alcohol is gone in morning, although not even the helmsman, who did stare at the bowl the whole night, has seen any creature coming.

Many scholars do think that neither Klabaster or the ship's kobold exist but that this whole thing is just another stupid excuse for the crewmen.

Klabaster is of neutral alignment and does not have a symbol or an organised cult.

MAGIC

Magic works similarly on the oceans as it works on land. There are however minor changes to the rules in the rulebook (page 133ff).

Magic users, that are solely present on ships are very rare. Most of the wizards that regularly are on ships, either for battle, for protection or for other reasons, were trained on land and do not differ from „ordinary“ magic users.

Alchemist can hardly be found on ships other than travelling. The reason for this is that alchemists have the tendency to blow things up and they often need fire. Both are not welcomed on any ship.

Demonologist are of course rarely on a ship. They are not very popular among the ordinary townsfolk and definitely not among the even more superstitious sailors. The same is true for necromancers, although there is rumour that the ghost ship Cinatit is also home of a necromancer.

Elementalists are quite popular among sailors, however this does not mean that are welcomed and not treated with suspicion. However they are seen as masters of water and what could be more useful on a ship.

Clerics are often on a ship, especially clerics of Manann, who receive a 1D3 extra magic points while they are on a ship. Clerics of the other gods do not receive a positive or negative modifier.

Druids are unable to cast spells if they are more than 3 kilometres away from land. Otherwise they do not have any penalties, but druids in general avoid leaving land.

Casting Spells

Casting spells on a ship is not different than casting spells on land, except of what is detailed below.

All binding spells for demons need one extra magic point to be successful, except when the caster binds a demon that is in any way connected to the water. Dispelling spells require one magic points less, except the demon is in any way connected to water, since demons feel „uneasy“, if something like that is the appropriate word for demons, on the water.

Dispelling fire elements by the spell Banish Elemental or Dispel Elementals does not require any ingredients and only 2 magic points. The cost for summoning a water elemental is reduced to 3 magic points. The cost for summoning a fire elemental is raised to 5. The WP test for controlling a fire elemental suffers a -10 penalty and a failure always means that the elemental attacks the ship before disappearing.

Summoning undead is difficult on the sea, since it generally lacks graveyards. Even when a corpse is present, the spell requires an additional magic point to be successful.

All checks for instability, with the exception of water and air elementals, and demons in any way connected to water have to be rolled every 5 rounds instead of every ten rounds.

Spells that are especially useful on a ship include: Fireball, Wind Blast, Lightning Bolt, Magic Bridge, Blast, Cause Fire, Breath Underwater, Walk on Water, Extinguish Fire, Breath Fire, Animate Water, Hail Storm, Decompose.

PORT CITIES

Originally ships were simply pulled on land or could at least sail into water that was shallow enough to directly transport cargo and equipment on land.

With the increase of the ship's size however it became necessary to build places where the ships could be fastened to a place, while the cargo could be cleared. With the increase in sea-trade this became even more necessary and the first harbours were built. What the exact time of the first harbour was is unknown, but it seems to date back well before the founding of the Empire by Sigmar Heldenhammer. Today we can assume that the first harbours were either built in Araby or far east in Cathay or Ind.

The construction of harbours offers some of the most unusual problems and challenges in engineering. The continuous and immediate presence of the sea, nature's most restless, temperamental and most powerful element, provides the engineer with an adversary certain to discover any weakness or fault in the structure built to resist it.

The first harbours must have been natural harbours in bays or river mouths. Even today most of the important harbours are situated in such places, the best example for this is Marienburg. Harbours were developed in two ways, some of them were places where cities already existed and the harbours later simply added to a city, we can assume that Marienburg is such a place, while others were constructed and a city later began to appear on the place of the harbour.

Later these natural harbours were modified by constructing walls and other installations on land. These installations were first simple warehouses and later whole infrastructure began to develop around harbours with places for selling and buying goods, shops for the equipment needed on a ship and later battlements for defending harbours.

Today's harbours can be put in two categories: trading harbours and naval ports. Often cities

have both types of harbour or one harbour that fulfils both functions.

While the trading harbours are open for any ship that reaches the port, naval harbours are often only accessible for battleships. The latter are also much better protected against enemies.

People

Today's harbours often look like a world of their own, a city within a city. Although formally the mayor or council of the city is also responsible for the harbour, the harbourmaster has a much similar position. He is responsible for maintaining the harbour and collecting the taxes. In harbours with military importance, the harbourmaster is almost exclusively appointed by the sovereign. The only exception to this is Marienburg that more or less is nothing than harbour and the council itself, the Ten, is running it, although with the help of important officials and through people especially assigned for the task.

Within a harbour, the harbourmaster has a similar position as a captain has on a ship, with the difference that he has no formal judicial power over the ships and those people that are onboard.

Besides the harbourmaster, the custom officers are the most important and influential people in a port. They are responsible for collecting the taxes as well as checking the cargo for all smuggled goods. Often they are part of the police, but in contrast to them, they are directly responsible to the harbourmaster. Any customs officer, who is not an officer in the strict sense of the word, can put a ship under quarantine and deny it to anchor in the harbour. Such a decision can only be reviewed by the officer's superiors.

Services

Only few ports are big enough to allow the gigantic triremes or galleons to moor directly in the port. Of course Erengard, Marienbrug, L'Anguille, Bordelaux, Bilbali, Magritta and

many other have facilities that allow even the biggest ships to moor. However many of the smaller ports that are along the whole coastline of the Old World are much too small for these ships. Those ports that are too small can only be reached by these ships in the way that they anchor out in the sea and transport their cargo and men to the port with the help of small rowing boats. Almost any harbour has a small fleet of sailing and rowing boats for this purpose.

Besides this fleet of transports, most harbours have a few ships and boats that are solely built and used to pull ships free that have run aground near the port. When a ship is in need of help and near a port it can signal this by raising its nationality flag upside down. These ships are also used in some harbours to pull the ship into harbour. Especially the bay of quietude that forms the harbour of Magritta is almost inaccessible for bigger sailing ships unless they are pulled.

Some harbours require pilots to reach them, either because they are at the mouth of a river or due to dangerous shallows. These pilots are often free-lance, but strictly organised in a guild that keeps a close eye that every ship has to have a pilot on board when reaching or leaving the harbour, no matter how experienced the navigator is.

Those ships that have no pilot on board, either because the captain wants to try his luck or because the ship is moored, are referred to as „dead“. Therefore ships moving without a pilot in a harbour are called „dance of the dead“.

Of course it costs an awful amount of money to get a ship pulled free, to discharge the cargo with the help of transports or to use a pilot and most captains do everything to avoid these costs sometimes pulling their ship with the help of lifeboats or regularly bribing the pilot's guild.

Maintain a harbour

The biggest problem of every harbour is the sand that is washed into it with every tide. Some of the biggest harbours a few hundred years ago were lost by the sand. Today most harbours employ small boats to shovel the sand out of the harbour or they use scrapers operated by winches on land to clear the harbour. However sand is a big problem for any harbour and it is the sand that makes the role of pilots so important.

Structures

Any harbour has a number of taverns and inns, most of them cheap, run-down places where the sailors gather to spend the few coins they have earned. A whorehouse is almost always present and the reason for worry for any ship's physician since it is the source of many infections of the genitalia that are handed from customer to customer.

Any harbour has of course a number of warehouses and mechanical devices to load and unload cargo.

However there are a few structures and buildings that are unique and important for any harbour.

Breakwaters are probably the most vital structure of any harbour. They are built to absorb or throw back as completely as possible the energy content of the waves. The basic design is based on a core of small rocks, often strengthened with concrete, and an outer layer of bigger rocks.

Breakwaters fulfil two functions, the first is to protect the harbour from at least some of the sand that is washed in by the tides, the second function is to protect the ships from the weather of the sea.

Lighthouses can often be found near the entrance of a harbour, where they fulfil the function of a landmark and of a lookout. The most famous lighthouse can be found in L'Anquille where it has reached dimensions to

be big enough to be used as the home of the city council as well as barracks for the local garrisons.

Some harbours, at least the strategically important, have numerous battlements to protect the harbour against enemy fleets.

The defensive weapons that are seen the most often are ballistas, trebuchets or catapults, either placed high above the harbour on cliffs or on large towers. These weapons are totally different from their tiny cousins used on a ship and sometimes are much bigger than the engines used for sieges. Although they have a longer range and can hurl bigger projectiles, they have the disadvantage of being awkwardly slow and that they have to fire at extreme ranges. Therefore it takes time for them to hit and sometimes even longer to hit precisely.

Of course in many harbours the catapult, the trebuchet and the ballista has been replaced by cannons and mortars. Again these are large immobile versions of the weapons used on ships or during sieges.

A unique weapon to some harbours, most notably Magritta and Bilbali, are ordinary chains. These chains lie on the entrance to the harbour and are raised during an attack, so that no ship can sail into harbour unless its crew has conquered the towers that hold the chain. The biggest of these chains can be found in Magritta where it closes off the whole of the Bay of Quietude.

The ports of Bilbali and Magritta are known to have another, much more flexible weapon for defence. They use simple small galleys and equip them with weapons like mortars, cannons or trebuchets. Such ships are often called bombards or cannon-boats. The weapons are ridiculously large for such small boats and would be unable to sail even a few hundreds metres into the open sea without fearing to capsize. Yet they are fast and mobile enough to steer along the coast and the harbour. At least they are fast enough to outmanoeuvre most

other ships, while at the same time delivering fire on them.

This tactic is most popular in Estalia, but many other ports have begun to equip such a small fleets.

Since most important harbours are well protected from the sea, any attack from this side is almost hopeless without a larger fleet.

Thus the best way to attack a harbour is from the land-side where the cannons and catapult cannot fire, a chain is useless and the bombards have to enter the harbour where they cannot manoeuvre very well.

Most harbours have a shipyard where new ships are built and older ships repaired. Not directly part of the harbour, but run by a shipwright it is nevertheless an important feature. Some harbours like Magritta and L'Anguille have two shipyards, one for the ordinary merchant ships and ships owned by privates and another shipyard exclusively for battleships.

Another structure now frequently found in bigger harbour and a development of the ordinary shipyard are the dry docks. Dry docks are pretty recent attempts to use facilities for the construction and repair of larger ships. While traditionally the hull of a ship is built on land and pulled into water when it is finished, where the work continues.

During the dominant time of the galleys this was perfectly sufficient since they had mostly a flat bottom. With the development of the galleon, the brig and other large sailing ships, the hull became larger while at the same time the ships have a bigger keel. That made construction on land more difficult. Therefore the dry docks were invented.

These docks consist of a box-shaped structure made of waterproof wood, that is either lowered into water every time a ship is built or is a permanent installation. The water is then pumped out of the box and the work can begin. The hull hangs on ropes in the beginning until it can stay afloat. After the first parts of the hull

are finished, the box is partly flooded, so that the hull begins to float. The structure is then continued and more water is allowed into the ship until the hull and the masts are finished and the ship only awaits the last phase of construction that it receives outside the dry dock.

An installation almost unique to war-harbours or harbours that are often called by battle-ships, privateers and a like, is the office of the prize-agent. These are often merchants within the navy that accept conquered ships and try to sell them. Most officers live solely of the advance payment that the prize-agents pays. The prize-agent later also sells the ships that were taken as prizes. Navy crews get between 50-70% of the prize, while privateers get between 60-80%. The rest goes to the crown. Of course the prize-agent takes a fee of up to 5% of the prize that has to be paid by the crew that conquered the ship. The crew of a pirate's ship of course takes all the money except for the fee.

The nation under which flag the navy or privateer sails has the right to buy the ship, otherwise it is sold on the market.

The money that is granted as prize depends on the ship and its state. Refer to Appendix A4 for the average price of a ship. A prize is not granted, when the ship is not considered a correct prize. This is the case when the ship did not belong to an enemy's nation. When the ship had no captain the prize is reduced by 40%.

The Major Ports of the Old World

(In Appendix C is a list of all bigger ports of the Old World)

Kislev

Erengard

Erengard is Kislev's gate to the rest of the world, as many point out. It is home of the Kislevite fleet and a mayor trading port. It is almost the most important port for the Norscans that conduct most of their trade either through Erengard or the smaller ports of the Empire, only rarely travelling to Marienburg.

Since Erengard is a vassal state of Kislev it is eager to keep its considerable amount of independence. As long as Erengard supplies Kislev with income from trade this is tolerated by the Tsar, but it may be a point of problems in the future.

Erengard suffers from icebergs during the winter, when some float near Erengard and threaten the trading ships. During harsh winters the port can even begin to freeze.

The Empire

The Empire has lost its major harbour when Marienburg declared its independence. Although the Emperor is constantly trying to find a way to get Marienburg back, the status quo is not likely to change soon. Although there is a great deal of animosity between Marienburg and the Empire, most of the trade is still done through Marienburg.

This is the reason why the Empire does not have a major port. It has an almost endless list of smaller harbours along the northern coast, but most of them are just accessible to fishing ships and have neither the size nor the installations to serve as bigger trading ports.

The only notable port in the Empire is Großhafern. It lies directly north of Middenheim on the shores of the Sea of Claws. It was a harbour planned by Altdorf to be a port of call for the small Imperial navy. The harbour was only a mild success, since the navy is small and the trade is either done through Erengard or Marienburg, leaving Großhafern with only goods that are of no interests for both of the other.

The Wastelands

Talking about the major ports in the Wastelands is like carrying water to Mannan. The Wastelanders call themselves a nation, yet there is nothing more than Marienburg, at least nothing noteworthy.

Marienburg is the biggest harbour of the Old World. Basically all goods to the Empire come through Marienburg. The city is in fact a giant

harbour and the city council makes sure that the harbour has priority.

The harbours that is basically the whole city, is primarily a harbour for trading. There are of course the necessary structure to defend the harbour, but since Bretonnia and the Empire have direct interests to keep the harbour at least neutral should they are unable to get it in one way or the other they would defend the city in times of need. Secondly Marienburg has more than enough money to buy any mercenary army.

The harbour of Marienburg has all installations necessary to build any type of ship, with the exceptions of galleys that are not used on the Sea of Claws. Of course many of the finest shipwrights can be found in Marienburg.

One of the strangest things is the elven quarter in Marienburg. Through a number of very profitable contracts the Marienburgers were able to get a monopoly for the trade with Ulthuan and allowed them to have their own quarter and jurisdiction in Marienburg. This of course made Marienburg the only port of call for the elven ships coming from Ulthuan. These ships are of course a favourite target for any kind of espionage, but the elves are eager to keep these people away and have not even given the Marienburgers more than rudimentary knowledge about their unique designs. In times of need the elves would surely defend Marienburg, which is another reason why Marienburg has not been attacked for many years.

Brettonian

Bretonnia has a strong and well trained fleet. Due to the fact that it is surrounded on three sides by the sea, sailing has a meaning almost as in Marienburg.

The fleet is pretty much in the same state as it was a few hundred years ago, possibly with the exception of new ships. Yet Bretonnia has some of the best captains in the whole of the Old World that are only matched by the elves.

L'Anguille

Probably the most famous harbour in the whole of the Old World. Although Marienburg is bigger and has more goods going through, L'Anguille has a glamour that reminds the spectator of times long gone. The harbour is dominated by the lighthouse that is the biggest building in the known lands.

L'Anguille is home of the Bretonian fleet, that operates the whole of the Great Western Ocean. Bordelaux is the other important navy port.

Although L'Anguille looks poorly maintained on the outside, it has the characteristics of an old mechanism: even when it is rusty and moves slowly and loudly, it still moves and is often more reliable than a new one.

The whole harbour is protected by an almost infinite number of towers armed with catapults and cannon that speak of the many battles that were fought over L'Anguille.

Bordelaux

While L'Anguille is the navy port of Bretonnia, Bordelaux is its trade port. Although home of a smaller part of the Bretonian fleet, that mostly patrols the north of Estalia and sometimes sails as far as Araby, its main task is to protect the sea trade going through Bordelaux.

Large warehouses are along the harbour where the great trading cogs moor.

Bordelaux is famous for its shallows and the high prices of the local pilots that are very aware of their importance.

Although an important centre of commerce, the harbour of Bordelaux is only poorly protected.

Brionne

Saying that Brionne has a port is almost the only positive thing one can say about it. Any ship that needs to sell some „special“ cargo is advised to go to Brionne.

The harbour is filled with small vessels from local fishermen, although many do not fish and have started their own much more prosperous business.

The harbour is hardly protected and the only reason why Brionne was not invaded for a few hundred years is that no one wants to bother with all the less trustworthy people of Brionne.

Couronne

Couronne is the third biggest harbour in Bretonnia. With its position near Marienburg only little cargo is going through Couronne. Most of the goods come from the farmlands around Couronne.

The more important goods are almost all shipped from Couronne to Bordelaux before they reach their receiver.

Estalia

Estalia is dominated by two things: pride and constant quarrel between Bilbali and Magritta. Both cities can claim to have a few of the most modern ships in the Old World. The reason for this is not so much a believe in progress, but the fact that the constant wars have destroyed more than one fleet and ships have to be replaced regularly.

Bilbali

Bilbali, the second largest port in Estalia, is mainly a trading port since the landscape around Bilbali is hardly able to support such a large city. The port is also home of the fleet of Bilbali.

Bilbali is excellently protected although not by towers but by the coastline that consist of either cliffs or shallows. The cliffs are also the best protection to Bilbali and allow it to close the harbour very easily with the help of only a few ships.

The most unusual feature of the port of Bilbali is the large watchtower that stands on a small island in front of the bay. The tower houses a large bell that is used to signal either approaching fleets or during storms to guide ships into the harbour.

Magritta

Magritta is, together with L'Anguille, the second biggest port of the Old World after Marienburg. Like Marienburg it is dominated by trade, but in contrast to Marienburg it has a remarkable fleet, mostly to wage war upon Bilbali and other Estalian kingdoms.

The most striking feature of the harbour is that it is placed in a natural bay called the Bay of Quietude. This gives Magritta a fair amount of protection against attackers. At the mouth of the bay, that is not wider than fifty metres, is a large chain that can seal of the whole harbour. Another mean of protection are the famous cannon boats of Magritta. These are small galleys armed with cannons that operated almost exclusively in the bay of Quietude and with their number and their manoeuvrability are a threat to any fleet.

Magritta's fleet is sailing the whole of the south sea and venture as far as the Southlands. They are mostly trying to keep the cargo lines open and do not really fight Arabian ships, unless they are pirates, since these may be future customers. Not surprisingly much to the dislike of the mayor cults.

Magritta is protected well against any attacker and is probably the safest port along the south coast of the Old World.

Tilea

Miragliano

Miragliano is the first port after passing Skavenblight and the marshes surrounding it. In many ways Miraglian is similar to Marienburg. Both cities stand on a number of small islands, are surrounded mainly by swamp and marsh land and are trading ports. Contrary to Marienburg, Miragliano is much more lax concerning the pirate problem.

It is primarily a trading port that mostly trades with Araby having itself little to offer other than marsh grass.

Remas

Remas lies in a large lagoon. The lagoon is home of a large number of fish that support the local fishing industry. Remas has a similar attitude towards pirates as Miragliano has. Some even claim that the whole fleet of Remas is nothing than a bunch of rotten pirates who should be quartered and burned at the spot.

However Remas supplies the south coast of the Old World with many strange fish and goods from Araby and the Border Princes, that have the aura of excellence in the manors of the Old World.

Tobaro

Tobaro is, together with Miragliano, one of the ports that frame Skavenblight and provides safe harbour before a ship must venture along the blighted marches.

Calling the harbour of Tobaro difficult, would be like calling coal to be a little dark. It is almost impossible to reach the harbour without a pilot and many ships that have tried to avoid the costs have seen themselves smashed on the rocks near Tobaro.

Since the harbour is difficult to reach, Tobaro has never played a mayor importance as a trading port. It is however an important city for gems and silver and any merchant trading in these has to send a ship to Tobaro sometime.

Due to the rocks, the harbour is almost impossible to attack. Tobaro has only a small fleet that mostly consists of small fishing boats and the boats of the pilots.

Luccini

Luccini is one of the most southern ports of the Old World. It is built on an old black-stone city. The city is rumoured to have been built by the elves, although the records of Ulthuan speak of no such harbour.

The fact that the site of Luccini was used as a harbour long before our time is an indicator that the place is more than suitable for a port.

Luccini has remarkably skilled sailors and many mercenaries come from Luccini. The fleet however is only small, but well trained.

Luccini has a much more strict attitude towards pirates than most other Tilean cities. Yet they are still to a degree tolerated in Luccini.

Sartosa

Sartosa is certainly a harbour and it also is certainly a well protected harbour. However most ships avoid Sartosa as much as possible, since it is a harbour of pirates.

Sartosa is the most important port of call for any pirate; it is the place to sell his booty without risking questions.

Since Sartosa lies on a small island it can be defended very easily and the pirates of the Tilean Sea are more than happy to defend it. The harbour is equipped with many towers from which the defenders can fire their catapults, trebuchets and cannons. Until now every attempt to conquer Sartosa or even besiege it for a longer period have proven to be futile and Magritta, as well as Bretonnia has lost many ships in such attempts.

The Border Princes

Since the Border Princes lack anything that constitutes a nation, the harbours along its coast are small and generally not interesting to merchants elsewhere. Besides this the Black Gulf is not a very navigable water and most captains are more than happy to avoid it.

The only place that in some way deserves the name harbour is Tilsp, a small harbour on the peninsula in the Black Gulf. It can in no way match the harbours of Magritta, L'Anguille, Marienburg or even Großhafern. The only important good that is traded in Tilsp is fish from the Black Gulf and scouts that venture into the Badlands and beyond.

The harbours has only room for small fishing ships and possibly a smaller sloop. The harbour is not defended, since its unattractiveness is its best defence.

MILITARY NAVY

Courage and love for our emperor are the only things between us and the barbarians. Our duty is to protect the shores of the Empire and sacrifice our lives if necessary. We swear never to let any enemy put a foot on the beautiful land that was forged by Sigmar and protected by his holy church. We shall follow any order without questioning it. We shall bring death upon our enemies and honour our lord Sigmar and our Emperor and the captain of our ship, who is his representative on this ship.

- oath spoken by sailors of the Empire

Today almost any nation maintains a navy for military purposes. During times of peace, that are so rare in our time, most of the ships are used for trading and basically showing off, while the rest is used to protect harbours and trading routes as well as hunting pirates should it be necessary.

The fleets vary in size, much depending on the importance of the sea for each nation. While the Empire has nothing than a small fleet of light ships, that are hardly able to patrol the Empire's coasts, Marienburg has the third biggest fleet.

The biggest fleet today is maintained by Bretonnia and is stationed in L'Anguille and Bordelaux. The second largest fleet is maintained by Magritta and basically monitors the whole of the Southern Sea, while Marienburg with its third largest fleet only monitors the Manannspoort Sea and its own vessels. Tilea has, even if it has a relatively long coastline, only a small fleet, that is broken down between the different city states. The fleets of the various city states are either unable or unwilling to provide even a minimum of security in the Tilean Sea and most of them are either in repair or on their way to fight their neighbours. The Empire has a small fleet that is almost not noteworthy, since most of the sea-trade of the Empire is done through Marienburg and the Empire has no larger port. The few ports that exist along the northern coasts are just big enough to have a few sloops and skiffs, that are used for trading during times of peace and

as troop transports during war. Norsca has a fleet, at least in a way. All of the Norscan ships are potential warships and should someone attempt to start a naval war against Norsca he would be surrounded by an almost infinite number of small ships, that make effective fighting with the ordinary weapons almost impossible.

The biggest rival to Bretonnia is Araby, which has an enormous fleet of warships. Although most of them are trireme and bireme, they are much more numerous than the ships of Bretonnia and also very effective in the Southern Sea. Kislev, well Kislev has no real navy, since it has little coastline, but it has a large portcity: Erengard. About fifty years ago, the Tsar decided, that such a port like Erengard needs a fleet of its own. After three years, when the first ships arrived, most of them were build in Marienburg, the treasure was not only empty again, but also the Tsar had problems finding enough volunteers. Therefore the Kislevite Navy, although impressive, is always undermanned and under-financed.

Another nation more than capable to fight it out on the sea are the elves and their kingdom of Ulthuan. We know little of the elven fleet, but we know for sure that it exists and considering their catamarans it is better not to anger them on sea.

We do not know if the chaos forces have a fleet. What we have seen or heard was frightening: Big ships made entirely of metal, although everyone knows, that metal cannot swim, crewed with hundreds of beastmen and chaos warriors. We can only hope, that the dark forces only have a few ships, and cannot send a complete fleet of these metal monsters across the oceans.

The ships are generally organised in fleets or squadrons, with the former being the bigger. A fleet is always commanded by an admiral, often a king's relative, no matter how small it may be. The admirals justify this with the answer, that this is just the way it is. Many others, from scholars to peasants, however, think that it is just a new way to create jobs for old men.

A fleet is divided into a number of squadrons. Each squadron has at least two ships: the flagship and the other ship. Of course most squadrons have more ships, often five or more. Squadrons can be put together in two ways: Firstly that every squadron consists of ships of the same type or of the same use; secondly that every squadron is able to fulfil every task by having a ship of any type. The latter is now much more common, so most squadrons consist of a flagship, a scout, a transport and a number of battle ships. Of course a squadron can only be commanded by an admiral.

The biggest problem for tacticians is communication between the ships, even though the admirals only rarely worry about it; if something goes wrong they have a new scapegoat. In early times communication was mainly done by shouting very loudly. Since this

has proven to be very inefficient and painful for signaller, new methods were developed. The first attempts used smoke or fire signals and were cancelled after ships have burned. In the end the best option was the use of flags. Therefore every nation has begun to develop their own alphabet with flags. The, so far, only problem with this was, that no one thought about the fact, that most of the sailors cannot read and write and hardly were able to signal a reasonable sentence or order. After this problem was solved, the signalling with flags was seen as a satisfying way of communicating between the ships of a squadron or fleet. The only disadvantage to this is, that it cannot be used in fog or in dark nights, in which case the communication is either done via a horn or again by shouting. The effect is, that most of the signallers are still unable to speak normally and can be recognised in every tavern.

MERCHANT'S NAVY

Besides the military navy every nation has a merchant's navy. The name may be a kind of misnomer, since it implies, that the merchant's navy is organised similarly as the military navy. This is of course wrong.

Instead every merchant has his own ship or number of ships. The only thing the various merchant's ships of a nation have in common, is that they fly the flag of their nation. Some nations also require every ship owner to give their ships to the sovereign in times of war, thus turning ordinary fishing boats into transports. The exception to this is Marienburg, where at least the rich merchants, that to a part also form the government, do not have to give their ships to be used as transports or battleships.

It can be estimated that up to 40 percent of all ships are exclusively used for trading, while 55 percent are fishing boats that are at least occasionally used for trading. They form the backbone of what we can regard as navigation, although the battle ships enjoy much more attention, without the various trading ships, we would have not seen the development we have over the last centuries.

Compared to battle ships, trading ships have much less men. Such ships do not need to make a fast turn or enter combat. Therefore everything takes a little longer on a trading ship. This is often a point of jokes by captains of battle ships, it is however not a sign of inexperience, but a sign that crew is less numerous than on a battle ship.

Most of the trading ships are slow cogs and similar types of ships. There are however numerous trading ships with a number of

weapons, mostly cannons, that their crews are more than able to use to defend their ship. In times of war, it is common practise to form convoys, especially if certain ports are under blockade. In these convoys a number of trading ships are put together, often more than twenty. They are protected by one or two battle ships. This kind of protection is of course almost useless in any serious attempt to capture them, however the battle ship is often able to catch the attacker in combat, while the trading ships are able to escape.

When we speak of merchant's ships and the merchant's navy, most will think of the fleets owned by the rich merchants of Marienburg and Magritta, we should however not forget that most of these ships are owned by their captains and only travel to ports should it be necessary. Therefore the trading lines are not regularly used by these ships. The lines are frequently used by the few rich merchants, while other ships are only occasionally on them. Even the most important trading lines are much less crowded than an ordinary street in the Empire's forest. Therefore an important trading line can mean less than five ships a month.

The main driving force behind every merchant's ship is of course profit. It is an unknown fact, that most parts of Cathay, Ind, Lustria and the New World were not discovered by battle ships but by trading ships under the command of a brave captain. The battle ships often came much later to secure this piece of land for their king or queen, since they are much too expensive to be wasted in an uncertain and probably disastrous expedition.

THE SHIP

In general ships can only be constructed in a shipyard. However some ships can be constructed and build on nearly every beach, most notably the longboats. Larger ships, that have more draught need to be constructed in a shipyard and later pulled into the water, normally when the hull and the masts are finished.

Building a ship is expensive and time-consuming. It can take up to a year and it is hardly possible for a PC to buy a ship. However stealing or inheriting it, is another thing.

The following text should give some information on the construction of a ship.

Before start

Before anyone starts to build a ship, he has to determine, what the use of the ship will be. A transport has other preferences, than a battleship. The sky, and the purse, is the limit and as long as someone is able to pay, he can get whatever he wants.

Of course he has to find a shipwright that is capable and willing to built his ship. The best shipwrights can of course be found in L'Anguille, Magritta and Marienburg, but nearly every harbour has a shipwright, that should be able to built at least small vessels. Building a galleon on the other hand is a different business and there may exist only one or two shipwright in the Old World, that have the equipment, the knowledge and the shipyard to build such a large ship. Also ordering a galleon would certainly stir the attention of the government, that wants to know, why someone may want to have such a ship.

The cost for employing a shipwright is 80/- per day. However the shipwright is rarely working alone. Instead he himself has to employ a number of carpenters, a sailmaker, a ropemaker and a mass of ordinary labourers. The average costs should be around 150/- per day. On the other hand a shipwright will often sell a ship

for a complete price, that includes his work and that of his employees.

Hull

The most basic part of a ship is the hull. Its form is pretty much the choice of the contractor and a number of different form can be distinguished.

A hull can have a raised stern and/or bow. It can have high or low sides. It can be wide or narrow and so on. Determining every possible form is almost impossible. Thus every form is considered to cost the same.

Three things determine the price for the hull: the wood, the size and the keel.

Three different kinds of woods are common for building a ship. The first and by far the cheapest is sprucewood and similar light woods, but these are also the weakest. It is mostly used for small fishing ships and requires an awful amount of tar and paint to be waterproof. The cost of lightwood is approximately 10 GCs for every square metre (that is length×width). A hull made of sprucewood or other lightwood has an average W of 25.

A much better kind of wood is oak and similar kinds of heavy woods. Although pretty heavy, it is hard and requires only little tar and paint. This kind of wood is frequently used for galleys, battleships and merchant's ships. The cost of heavy wood is around 16 GCs for every squaremetre. A hull made of oakwood or other heavy wood has an average W of 35.

The third and by far the best wood for ships, is called Airis. It is very rare and can only be found in the mountains of Estalia. It is extremely hard, while at the same time being rather light. The costs for ships made out of Airis is 30 GCs per squaremetre, which makes it rarely used, except for flagships, the personal ship of a king or something like that. A hull made of Airis has an average W of 45.

The kind of wood also has a fundamental effect on the live of a ship. A ship made of spruce is

unlikely to survive one year even without combat. A ship made of oak or other heavy woods has a life-expectancy of three to four years before the hull has to be replaced. A ship made of Airis can last up to ten years and sometimes longer.

However the life expectancy of a ship also depends on the use of the ship, the waters it crosses and the maintenance of the hull.

A keel is necessary for all ocean-going vessels, as well as for all sailing ships. The keels has to be made out of the same wood as the rest of the hull and its price should be something like 25% of the price for the whole hull.

An alternative for the keel is swords. These are often used by small traders, that have to travel into shallow waters or up a river. Swords are two blades, one on each side, that can be lowered into the water, should it be necessary. These are a good alternative for a keel, but are not suitable for crossing an ocean. The price for swords should be something like 15% of the price for the hull.

To increase the strength of a ship, metal can be nailed to the hull. This increases the price of the hull by 15%. Most often iron is used, but there are a number of ships with copper plating. Such plating also increase the W of a ship's hull by 10. They are often used on ships, that have to sail north frequently, to avoid damage to the hull by the ice.

Ram

Rams and spurs can only be mounted on rowing ships. While the ram is designed to destroy the hull, the spur resembles a spike that is driven in another ship and when pulled out leaves a hole. They can be made out of iron, copper or bronze. The price for a ram should start at 200 GCs for a simple iron ram and varies considerably with style and decoration. A spur may start at 150 GCs.

A ram made out of copper, with decorations and in the form of a dragon's head can cost up to 500 GCs.

Figurehead

A figurehead is something absolutely unnecessary, unless you believe in the legend, that it contains a ship's soul. However most ships have a figurehead and every captain sees the figurehead as the most identifying feature of his ship.

The costs for a figurehead also depends very much on the complexity of it. The prices start around 50 GCs for a crude wood head and can rise to a few hundred GCs for artistically designed figureheads.

Rigging

Before we can start with the rigging, a ship has to have a mast or more of them. The masts are normally connected with the keel and of the same wood.

A ship can basically have any number of masts, but normally not more than one mast per seven metres of length. There are of course a number of different types of masts and different costs, but for ease of use every masts costs the same. The length of the masts and the price of the wood (see above) determine the price. The length of the main mast should be between 65% to 100% of the length of the ship. The average height of masts, when the ship has more than one, should be around 70% of the length of the ship.

A number of different sails can be differentiated. What kind of rigging a ship has, mainly depends on the price and the number of men. For ease of use, all three kinds are treated as having the same effectiveness, unless you want to use more complex rules (see below). The price for rigging includes the price for the yard, that is the horizontal beam on which the sail is attached.



fore and aft

The most common rigging is the fore-and-aft rigging. This rigging requires a single masts. It is similar to the lateen, but requires less men. The sail is set by a rope, that runs along the masts.

The fore-and-aft rigging is generally used for smaller ships. Bigger ships often have a fore-and-aft rigged sail as support, while the main sails are square rigged.

The costs for a fore-and-aft rigged sails should be between 25-70 GCs. For every metre of the mast on which the sail is rigged I suggest a price of 5 GCs.



lateen

The oldest form of rigging, is the lateen sails. The sails is shaped like a triangular. This is frequently used by the elves, since it gives the ship a more slender appearance. It also requires only a single masts. It

does require more men and can be difficult to operate in heavy weather.

The price for a lateen rigged sail should also be 5 GCs for every metre of mast rigged in this way.



square

The newest form of rigging is the square rigging. It is not directly new since most of the galleys have used it as well as the longboats. However it was „reinvented“ and much improved with newer forms of tackle. It uses square sails anchored to the masts at the bottom and the top.

It is mainly used for bigger ships and numerous square rigged sails can be places on top of each other. The biggest disadvantage of a square rigged sail, is that it takes many sailors to operate, as well as a rather complex system of ropes. The biggest advantage on the other hand is, that square rigged sails can be placed together easily.

This of course means, that the price for such a rigging is the highest. The price should be

around 8 GCs for every metre of mast, that is square rigged.

The sails are generally not coloured. Yet the Norscans are know to colour them with red stripes, while some ships have coloured sails. Some fleets, most notably the Arabian have green sails on their flagships. The costs for coloured sails are not higher, but may give the ship a more personal look.

Every mast may carry a lookout. From simple platforms, to small castle-like structures, the lookout can be everything. The range of sight from a lookout is increases by 5 km. The elves in particular are known to place their best marksman in the lookout during battles, from which he can attack the other ship's crew (no modifier for anyone, except for people in a castle or below deck). The lookout is also a good place, to station someone with a bag of bombs or grenades.

A lookout costs 100 GCs, however simple platforms may be cheaper, while complete castle-like structures are more expensive.

Masts over twenty metres are often constructed of two or more parts, which are connected. Such a masts does not cost more, but may be cheaper to repair. The connection is called top and can serve as an improvised lookout, but does not have the advantages of an outlook, unless the sails above are taken down.

Every mast is held by a number of cables. These are called the standing rigging. It is normally not changed, but can be used to move the mast a few centimetres in each direction. Since such a modification is only necessary for fine-tuning the ship it is not reflected by rules here. The ropes that are used to manipulate the sails are called the running rigging.

Oars

On rowing ships, the oarsmen of course need oars. The standard oar costs 1 GC 18/-. There

are however much more expensive oars, the best example being the iron plated oars of the lanceotto (see below). The prices for these oars should start at 2 GCs per oar.

Now that we have equipped our oarsmen, they need something to sit on. The banks are built right into the hull and are generally of the same wood. The price for a bank should be around 10% of the price of the hull. Therefore a trireme, which needs three banks, has its price increasing by 30%.

Deck

Every hull already contains a deck, although such a deck is curved and not suitable for anything, except taking a bath.

A normal flat deck is generally made out of the same wood as the hull and costs 60% of that price. Each extra deck costs another 40%.

Instead of a full deck, some ships only have an aisle, that runs in the middle of the ship, with the cargo on each side. Such a deck costs only 20% of the hull, but is unsuitable for fighting or basically anything else than transporting goods.

The deck can already have defensive armaments. These are platforms on the stern and the bow or even castles. A simple platform is always necessary at the bow of a ship where the rudder is situated. The wood and its length determine the price for a platform. Normally it is made out of the same wood as the hull and is between 10-20% of the length of the hull.

Should the ship carry weapons, a simple platform is not enough, instead the ship needs a reinforced platform to carry the weight. The price for such a platform is 50% higher than the price of a simple platform.

A castle needs a reinforced platform. The castle itself costs at least 150 GCs, in which case it looks like a simple stable. More complex castles, that have arrow slits and a small platform for mounted crossbows should cost around 300 GCs. The fore-castle is often referred to as the foxsel or foksel.

Steering

Two different types of steering exist. The first are one or two steering oars, the other is a rudder.

The advantage of the rudder is, that it is much easier to use and pretty efficient. The disadvantage however is, that it is unsuitable for heavy weather and almost uncontrollable.

The rudder again comes in two forms. The simplest is the tiller, which is a horizontal bar attached to a blade. The tiller is easy to use, but has the disadvantage of requiring the helmsman to sit almost at water level.

The much more complex steering wheel allows the helmsman to be placed much higher than water level, while at the same time being easy to use due to the transmission that is done through a shaft that runs through the wheel. A number of chains are connected to the shaft and these chains turn an ordinary tiller that sits below deck. The disadvantages of the steering wheel are apparent, it is much more complex and thus expensive and much more difficult to repair.

A steering oar should cost around 5 GCs. A tiller around 10 GCs and a rudder should cost 20 GCs upwards.

Anchor

Anchors come in two forms: stone and iron.

Stone anchors are the oldest form and consist of nothing than a stone on which a rope or a chain is attached. They are easy to improvise, while offering enough weight for small boats. They cost not more than 2 GCs each.

Larger ships on the other hand generally carry an iron anchor. The small versions can be lifted by hand and cost around 5 GCs. Except for small boats, ships generally carry two of these plus a number of replacement anchors, should one get lost. Bigger ships, such as a caravel, carry at least one larger iron anchor, which costs around 10 GCs and a number of smaller anchors, in addition to replacement anchors for each of them.

The large iron anchors cannot be lifted by hand, instead they require a winch, that consists of a large cylinder with a number of handles poking out, so that a number of sailors can attempt to turn it. A winch costs around 20 GCs.

The main use for an anchor is of course to keep the ship in place. An anchor can also be used for kedging. Kedging is a way to free a ship when it has run aground without waiting for the high tide. To do this, the anchor is put on a dinghy or a lifeboat, the cable is run out and the anchor lowered. When the anchor has a hold in the ground, the crew turns the anchor winch to pull the ship free. Of course such a manoeuvre is useless, when the ship has no contact to the water and has run aground very badly, it is only effective, when the ship sits on a shallow.

Armaments

A ship can carry a number of armaments, from simple mounted crossbows, to large trebuchets or even cannons.

The ballista is similar to a large crossbow. It fires large arrows or bolts, that can be used to damage or destroy a ship, by setting them on fire, or to capture a ship and pull it to the attacker by a long rope, that was fixed to the arrow before it was fired. The costs for a ballista are around 200 GCs.

A catapult is a well known siege-engine, that is simply used on a ship. It propels projectiles with the help of twisted ropes, that are then released. The catapult is not very precise, but on the other hand can fire almost any kind of projectile (even cows). A catapult with its simple design costs around 150 GCs.

The trebuchet is a pretty recent invention and in many aspects similar to the catapult. The main difference between the two is, that the catapult uses tension to fire a projectile, while the trebuchet uses weight. From afar a trebuchet

looks like a giant sling, that is mounted on an arm, which itself is mounted on a construction. On the shorter end of the arm is a weight. When released, the arm moves similarly to the catapult. The difference is made by the sling, which is attached to the arm. This sling increases the speed and leads to much more range of the weapon.

The trebuchet is an excellent siege engine, being able to hurl rocks from great distances, it needs however much room and is therefore seldom used on ships. The price for a trebuchet is around 250 GCs.

The trebuchet and the catapult should in general not be used upon sailing ships, possibly one such weapon can be mounted in the stern. Placing them on the sides of a ship means, that they not only damage the opponent, but also the rigging of the user's ship.

The cannon is often a lighter version of the cannons used on land. It is clumsy, difficult to use, dangerous, but capable of fighting any vessels from great distances. On ships, cannons are normally filled with iron balls, although there are a number of different projectiles available (see below).

The price for a cannon is around 200 GCs, but requires installations for another 20 GCs, if it is placed below deck (e.g. lots of ropes, hole in the sides with hatches, etc.). If the cannon is not placed in the stern or the bow, an even number of cannons needs to be purchased, to avoid unbalancing the ship.

A weapon similar to the cannon is the mortar. Such a weapon can only be mounted on deck since it shoots the projectiles in a high curve and not in a (more or less) straight line. The mortar has a shorter barrel than the cannon. The advantage of the mortar is its longer range, as well as the possibility to turn the barrel easier, than turning a cannon.

A mortar costs 200 GCs, but the planks need to be reinforced for 50 GCs (also see below).

Both, the cannon and the mortar, need powder, which is normally stored in tar or wax sealed barrels. Due to the danger of explosions, these barrels have to be placed in a special room, which costs 30 GCs extra and should be far away from the kitchen or any other source of light.

The last of the weapons similarly found on ships is the mounted crossbow. Such a weapon cannot be used against whole ships, but against individual targets on another ship, as well as defending the ship against boarding. The mounted crossbow is a larger version of an ordinary crossbow, with more range and a higher velocity.

A mounted crossbow costs 30 GCs.

A special kind of weapon is the boarding bridge. Such a bridge is only useful on rowing ships, since sailing ships are much more difficult to manoeuvre along another ship in the midst of combat. The boarding plank is a way to bring land combat to the sea.

A boarding bridge is an ordinary plank, about 1-2 metres wide and up to five metres long. It is often equipped with spikes on the one hand, so that it is firmly attached to the ships.

A boarding bridge costs 20 GCs, plus 5 GCs for spikes. Any carpenter can however improvise it.

Handling

To find out what the general handling of the ship refer to Appendix A3. There are the ships listed with the average handling of such a type. Therefore a brig, although heavily modified will still share the general handling of a brig.

Should a ship have no or loose its keel or swords, the handling will drop by 20. Should the rudder get lost, the handling will drop by 50.

Repairing

Having a ship is nice, but it is expensive to be maintained. Shells begin to sit on the hull, decreasing its speed and sails are often lost during a storm, battle or a stupid captain.

In general replacing an item should cost between 10% and 50% of the original cost, depending on the damage.

The most expensive is the careening. When the ship's hull is not set with metal plates, the hull begins to build up colonies of water molluscs. This is especially true for warmer water, basically all water south of Marienburg. The using of Airis reduces the build up of such molluscs, but cannot prevent it.

As a rule of thumb reduce the speed of a ship by 20% for every three month it is in warmer waters and not build out of Airis. If it is build out of Airis reduces this by 5% and another 5% reduction, if the ship was not in warmer waters.

Should the ship not have been careened for a year, there is a 70% chance, that teredo worms have begun to drill holes in the hull. The chance is increased by 5% for every following year. Should teredo worms have begun to drill holes in the hull, the hull needs to be reconstructed, with the full cost for such a hull, plus 30% for demolishing the old hull.

Careening requires to drag the ship out of the water, generally into a shipyard or on a beach, if a shipyard is unavailable. The ship then has to dry, the accumulated sea-life scraped off and the hull treated with a mixture of sulphur, tallow, white lead and crushed glass. Careening a ship in a shipyard takes about two weeks and costs 5 GCs for ever metre of hull treated. Careening it on a beach takes up to one month, since the ship has to be laid on the side and the whole rigging deconstructed.

Blessings

Although not mandatory, it is good custom to have the ship blessed by a cleric. In fact some sailors would not even put a foot on a ship, if it is not blessed.

Most frequently is the blessing done by a cleric of Manann, although nearly every temple is willing to bless a ship when the „donation“ to the temple is good enough.

The form of the blessing depends upon the donation. For 2 GCs a cleric would send an initiate who would hardly have a look on the ship and mumbles some words. On the other hand donating large amounts of money to a temple can lead to the high priest blessing every single plank of the ship and its crew.

In some parts of the Old World, especially Marienburg, it is expected to donate a considerably amount of money to the temple and get the ship blessed.

Other Equipment

Although by now should our ship be ready to leave the harbour, there are a number of other things that can be bought and are in fact necessary for travelling on the waves.

Most of them will only appear in Appendix B, but some should be mentioned here.

The powder for cannons and mortars needs to be stored properly. This includes that they have to be stored water-proof. Powder, which is not stored waterproof is useless after two weeks on sea. Normally it is stored in barrels, which also means, that after one shot is fired the whole barrel will be useless, unless it is again sealed with tar.

The price for a barrel of gunpowder is around 100 GCs and contains twenty shots. Each iron balls costs 2 GCs and chained or barred balls cost 3 GCs.

A hourglass may seem to be unnecessary, but it helps to keep track of the shifts and no sailor is much amused to learn, that his last shift was longer, than it had to be. The average cost for a hourglass is 70 GCs. Besides a hourglass, the ship may need a bell. Such a regular bells, without any engravings costs 5 GCs

Although in theory, a ship should be waterproof, it hardly is. Even when it remains undamaged, a lot of water gathers during a day and has to be pumped out of the ship. Therefore almost any ship needs at least one pump. Such a pump costs 2 GCs.

To seal a hole, that was just repaired requires tar. A barrel of tar costs around 2 GCs.

Most ships have a small boat, called dinghy. Such a boat can be used as a lifeboat or to sail into shallow ports. To calculate the costs for such a boat, refer to the information above concerning the hull, but it already contains oars. It may contain a sail, but this is only likely for big dinghies.

A dinghy is either pulled or, in rare cases, carried on deck.

CREW

A crew consists of a number of people, that fulfil different tasks. Although most of them are sailors or claim to be sailors, most of them are specialised.

It also depends very much on the type of ship and its mission, which of these people are actually on board. While every boat or ship has a captain, only larger boats have a carpenter or a helmsman.

Captain

The captain of every ship, stands on the top of the food chain. He has basically the absolute power over a ship and its men. The only exception to this is, when the ship is part of a fleet or squadron in which case, the fleet has a commander, normally an admiral, that stands above the captain of an individual ship.

Even when a higher military or even the emperor is present, the captain has command over them. In practise however the captain is rather cautious not to ignore any comment or „advise“ by higher ranking people onboard.

The captain is always a captain, which means that no matter what rank the commanding officer is, he is always called captain, even if he just is a lieutenant

The captain has judicial power over his men and can sentence and execute any verdict without fearing consequences.

He is responsible for the whole ship and everything onboard. Should someone get lost or something broken he not only has to stand trial in front of the court of admiralty, but may also be liable and has to compensate any loss. The most famous example of this was the Estalian captain Miguel Jorge Crameron, who was not only quite old, but also rather odd and was able to wreck his ship shortly after leaving the harbour. Crameron was, after he got rescued by a few fishermen, executed.

The captain is the last to leave the ship, when it is sinking. Since the captain can transfer his

command, for example on to the cook, rather easily, this is rarely a problem among them.

The captain is generally holding a briefing every morning, in which everyone has to report any incident. In this briefing the captain gives out the orders for the day.

Becoming a captain is pretty difficult in theory, since it not only requires considerable skills, but also experience. In practise however, all of the captains come from the nobility. Also there seems to be a preference to choose the eldest people in the navy to become captain and often admirals. This has lead to the most incompetent people to become captain. The most famous was the Bretonian admiral Claude Hernè de Cobertain, called „Pompo“, who was sixty-one, when he became admiral and got the command over the Bretonian flagship Saint Albert. For Pompo appearance was everything and he kept a close eye, that his men looked absolutely identical, in one instance, when a sailor returned from harbour with a black eye, even ordering the whole crew to paint their left eyes black. Pompo was definitely not a fighting admiral and his ship was later successfully attacked and boarded by three fishing boats, which were insulted by Pompo.

Officers

Below the captain are often a number of officers. These men are generally not assigned to special tasks. They can be regarded as advisors of the captain.

The first officer is the representative of the captain and often is the one, who directs the daily work upon a ship.

They are often junior officers or officers that hope to become captain very soon. Just like court favourites they are often more occupied with their rivalries than with the daily routine of the ship.

They have to attend the captain's briefing, that is held every morning and in which the general situation of the ship is discussed. Since they are

officers they can command everyone on board with the exception of other officers and a pilot.

Even though they have no formal responsibility, it is a favourite past-time among officers to conduct alarm training.

During the night, they often have to observe the night watch, although the watch is commanded by either the boatswain, the purser or the helmsman.

Officer of the troops

The officer of the troops is the commander of any troops onboard, should any be present. He has to co-operate with the captain for any amphibious assault.

The biggest problem is that rivalries between the captain and the officer of the troops make any amphibious operation more or less futile. Another problem is of course, that amphibious operations are still in its footsteps.

The officer of the troops is often of the same or a similar rank as the captain, resulting in frequent quarrel between them. While the ship is on the sea, the captain has absolute power and that includes command over the troops, that are present. Only when the ship is moored in a harbour the officer of the troops regains his command over the troops.

The officer of the troops has to attend the captain's daily briefing and should in theory advise the captain. In practise the officer of the troops is not very well respected among the naval officers and any of his advises are normally ignored.

The daily routine of the officer of the troops is to ensure, that his men are equipped and ready for action. For any problems between the soldiers and the sailors, the officer of the troops has the right of judgement together with the captain, although the captain has the last word.

Navigator

The navigator is the person responsible for the course of the ship. Before the first reliable

maps appeared around three hundred years ago, the navigator only had to rely on legends and rumours. After Alphone de la Cour has invented the first navigational instrument, today called Verena's staff, but often referred to as Alphonse's crutch, the art of navigation has become much more exact, although there can still be divergence of more than a hundred kilometres.

The navigator is one of the most important people on a ship, he stands just below the captain in the line of command. He himself has exclusive command over the helmsman and the other people that work on the rudder.

The navigator is also one of the few people, except for the captain, that has a room of his own. Here he spends most of the day over the maps. During the night he can often be found on deck, trying to calculate the position of the ship with help of the stars (s. navigation below).

The navigator has to keep a book, in which every position of the ship should be included. Since navigation is still not an exact science, most of the entries are only educated guesses and far from being precise.

Although the navigator is theoretically responsible, that the ship reaches its destination he is never held responsible, should the ship miss its destination by just a few hundred kilometres, since the training of a navigator is much too expensive. In fact navigators enjoy nearly immunity and the Court of Admiralty has not decided against a navigator during the last hundred years.

The navigator is generally an experienced officer. To become navigator an officer has to enlist into the navigator school, beforehand he has to have made at least three longer journey on a ship, which means three journeys that leave the sight of the coast. Afterward he becomes a navigator's apprentice and is then finally tested by the admiralty.

Since navigators are pretty rare, no more than three navigators per fleet, they are respected

and form a kind of elite among the sailors. The position of a navigator is also one of the very rare positions that is open to non-noblemen.

Midshipman

The midshipman is a junior officer. He normally has just left training and is on his first naval campaign.

Since he is generally inexperienced most of the sailors are trying to pull his leg and most of them have been the target of rather cruel jokes. Unfortunately like all officers, they have the memory of an elephant and may get the command of a ship one day.

A senior officer or the boatswain, who are responsible for his practical training, often observes a midshipman; although in theory the captain is responsible for the training.

The midshipman has to attend every captain's meeting, but has not the right to speak in this meeting. He has no responsibilities unless some are specially assigned to him.

Surgeon

By the Imperial Charter Concerning All Vessels of 2326, the Emperor declared, that all ships should have at least one surgeon. This Charter only applied to Imperial vessels. Shortly afterwards, the other nations began to adapt that rule and soon afterwards almost any navy ship contained at least one doctor. The exceptions are of course Elven ships, which already had a trained physician, although not technically titled the ship's surgeon.

The surgeon is generally a physician that is also an officer of the navy. The normal career for most of them is, that a physician joins the navy and makes a cursory training in the naval academies. This does in no way mean, that they are capable of fulfilling the position of an officer.

The biggest problem with the surgeons is, that they are underpaid. This means that skilled physicians are rarely found on a ship; naval

physicians are often not more than a bunch of butchers.

The basic method of almost any surgeon is „a lot helps a lot“. Thus the physician often gives a patient twice or three times the dose, that would be sufficient. Many people have claimed that sailors have not survived because of, but despite of the surgeons.

The surgeon is only responsible to the captain and the officers do not have power of command over a surgeon. The surgeon has to examine the crew before it is hired and has to examine them every month. He has to report any illness immediately to the captain.

The surgeon has a small supply of herbs and medical instruments. He is also, together with the cook and the captain, the only one who has access to the ship's supply of alcohol, since getting the patient drunken is one of the few reliable methods of sedation and getting the surgeon drunken also helps a lot.

On every sailing ships one of the lower decks is painted in red. Here the wounded or ill are treated and the colour of the room has the meaning to obscure any blood loss.

A sailor often assists the surgeon. This sailor is then not part of the normal crew and does not belong to a certain shift. Instead he only has to assist the surgeon. Such a sailor is generally called loblollyboy.

Boatswain

The boatswain can very well be regarded as the most hated person on a ship. He stands between the ordinary sailors and the officers.

Although he is not an officers, he has the power of command over the sailors and has to make sure, that every command of the officers is followed. To do this the boatswain has a pipe with that he gives command through a variety of different tones (Secret Language - Seamen is required to understand the piping commands). Since he also has to execute any punishment, he is often referred to as the Boat's Swine.

In general he is responsible for order on board and the general maintenance of the ship. Thus he has to control the whole ship at least once a week, to control all ropes and the hull. He has to conduct any repairs. He also has to get the ship cleaned at least once a week.

He also is responsible for any prisoners. He co-operates with the purser concerning the expenses during a voyage, although this task is of little importance unless the ship is on a longer campaign.

In harbour the boatswain is responsible who of the crew is allowed to leave the ship at what time. He is also responsible for the mooring of the ship and any supplies that need to be supplemented.

Every morning the boatswain has to attend the meeting of the officers and inform the captain of the situation of the ship and the crew.

By agreement between the boatswain, the purser and the helmsman he has to take the command over the night watch every third night.

He is responsible to the officers, especially the captain.

Since he is not an officers, but the highest-ranking sailor, boatswains often see themselves as much better than the crew.

There were a number of instances in history, most notably the mutiny of the *Bergen*, in which the boatswain and his behaviour has led to an uprising of the crew.

Purser

The purser, also called clerk, as the name implies, is responsible for the money of the ship. He controls any expenses and has to agree to any expense, before it can be made, unless of course one of the officers makes the expense.

He has a similar position as the boatswain, although he has less contact with the crew.

Besides the direct expenses, he is also responsible for the cargo and the supplies.

Therefore he has to meet with the cook every day to discuss, which of the food on board should be used now and which should be spared for later.

He keeps a record, called the *Prick and Cheque-Book*, in which he has to record any expense and the cargo, as well as the supplies. The book also contains the crewmen with their name, punishments, absences and deaths.

Every ten days, the purser has to control the condition of the crew and count any sick crewmen. This is recorded in the *Prick and Cheque Book*.

Every morning the purser has to attend the captain's meeting, in which he has to report of the current state of the supplies.

Together with the boatswain and the helmsman, the purser is commanding one night watch every three nights. The three can agree who takes which shift.

Besides the general supplies, the purser keeps a special records of all candles, lanterns, flints and any other source of illumination or fire. These have to be issued by the purser.

Before any crewmen is allowed to leave the ship, he has to show a special ticket, called „free paupie“. This ticket can be signed by the captain or by any two of the purser, the boatswain and the helmsman.

When the ship returns to harbour, the purser is responsible for paying the men that are alive.

The purser may belong to the ordinary crewmen, but he can also be an officers, depending on the size of the ship.

Gunner

The Gunner can be found only on ships, that carry numerous weapons like catapult, ballistae, trebuchets or mortars. He is the one, who is responsible for directing the fire of these weapons, while a group of sailors or soldiers operates the weapons.

His position in the hierarchy is similar to that of the purser or boatswain. He is not an officers, but in a rank similar to a NCO on land.

Besides the actual firing, he is also responsible for maintaining the weapons and training the sailors and soldiers, that have to fire them in combat.

The gunner also has to ensure, that all weapons have enough ammunition. He has to be present during the captain's briefing every morning in which he has to make his report.

If a gunner is present he is commanding one nightwatch every third night. In this case, the helmsman does not have to command a nightwatch and instead only has to supervise the rudder.

Helmsman

The helmsman is the person that steers the ship. He is responsible for following the course, which the navigator has calculated. His position is at the rudder and he often has a small cabin right next to the rudder.

He is rarely steering the ship himself, generally he commands two or three sailors, depending on the size of the ship, that turn the steering wheel.

The helmsman is directly responsible to the navigator. On smaller ships, the navigator is the helmsman.

Every morning the helmsman has to attend the captain's meeting and report any events.

He is one of the three men, the other being the purser and the boatswain, that are responsible for the night shift. He has to command every third night shift, although it is left to the three, who is commanding which night shift.

Should a pilot be onboard, he is directly commanding the helmsman. The helmsman is also responsible for setting and hauling the sails and in this function can give orders to the boatswain, who then is responsible that the sails are set or stroked.

Cook

The cook may appear to be the least useful person on a ship, however every sailor or soldier can tell, that moral drops considerably if the food is bad. Thus cooks in general share some prestige among the officers, a prestige that is hardly agreed with by the sailors.

In general, the food on a ship is close to being horrible, with the exceptions of officers and the captain who may have access to eatable meat and fruits. The cook is responsible for this, since he tries to „bribe“ the higher ranks to treat him well, while he feels safe against the sailors due to the protection of the higher ranks.

A privilege that is connected with the cook, is, that he is allowed to keep an open flame in his kitchen, while fire is otherwise strictly regulated and generally prohibited on a ship, with the exception of the purser, who keeps all lanterns, candles and flints. The kitchen is also one of the few places that are always warm on a ship.

The cook has to report to the purser regularly, about twice a week, to discuss the supplies and the diet for the next week. He is also responsible for adding supplies, should the ship reach a harbour, but he must do so with the allowance of the purser.

The main task of the cook is, not very surprisingly, to cook. The main diet on an ocean-going vessel consists of dried meat, biscuits and alcohol. Besides as a drink, alcohol has also the purpose to keep the men satisfied and as a mild sedative, should someone get injured. Therefore every ship has a rather large amount of alcohol, mostly cheap schnapps or rum, on board, while the amount of water is often smaller. Water is rarely given away as a refreshment, instead it is mostly kept for the officers. In theory every sailor should get a mug (about three quarters of a litre) of fresh water every day. Coastal ships are able to keep that amount, while ocean-going vessels rarely have access to such a quantities of water.

On smaller ships, that try to avoid the Imperial Charter ordering one surgeon per ship, a cook may also work as a physician. This does not mean, that the cook is any way trained to amputate limbs or heal wounds. Instead it is often the cook, that needs sedation, while the patient often tries to stay conscious to keep a close look on the cook. The most famous example of this was Chris, a cook on a Bretonian vessel, that once said: „Man or beef, in the end it is just flesh you have to cut. And if add a little garlic, they both taste good.“

Carpenter

The carpenter is directly responsible to the boatswain and has to get the ship repaired. He is often the only person on a ship, that can actually handle tar and wood.

The carpenter is often a real carpenter. That means, that it is not a sailor, that was given a plank and planer, but a carpenter that hired a ship and then became the ship's carpenter. He often, especially on larger ships, has a group of a few sailors, that help him should repairs be necessary. These helpers are not very well trained, instead they get some rather cursory teachings.

Every larger ship has a certain amount of wood onboard that can used to repair hole and replace other broken parts. However no carpenter is able to repair a heavily damaged ship, the only thing possible is to make the ship afloat again, so that it can steer into the next harbour. The most important equipment for a carpenter is a pot of tar, that is often referred to as Khorne's Blood by the crew. The tar is used to seal planks and glue together wood. Since tar is stiff, it needs to be heated in the kitchen before it can be used. Before a battle the tar is generally placed over the oven, not avoid losing time with heating it. Another use for the tar is to close off wounds. Should a limb be amputated the stump is put in hot tar, to seal the wound.

Another task of the carpenter is to make coffins. Although ordinary sailors are just wrapped in cloth and weighted down with

stones when they are dead, officers have through the Imperial Admiral's Directive the right to be put in a coffin, before they are thrown overboard. A dead captain has to be returned to the next harbour and his body is often put in a barrel of alcohol to avoid the rotting of the corpse.

Oarsman

Oarsmen are sailors that propel the ship with their muscles. Since sailing ships are still in their infancy and rowing ships much more common, there is a constant demand for oarsmen.

There are numerous way to satisfied this need. The most common are the use of slaves and the hiring of men. Slaves are mainly used in Estalia and Araby. The slaves are often not very enthusiastic about their work and since they are generally not kept very well, they die early. Therefore many Estalian and Arabian ships are hunting each other much more for men, than for gold. Slaves are often tied to their banks and also sleep there.

Free men that have chosen to become oarsmen are pretty rare. The best examples of this are the lancelotti of the Duchese Maria del Pietronese (s. below). They are generally much better trained, more healthy and much more efficient. Besides rowing, they often fulfil a second function of warrior and a ship full of trained and armed oarsmen have convinced more than one ship to surrender. There are numerous reason why someone may chose to become an oarsman, the most obvious is flight from prosecution. There are also people, that look back on a long tradition of oarsmen and step into their forefather's footsteps.

Sailor

Sailors here are the seamen, that operate the sails of a sailing ship. They are often people, that were drawn from the streets, a method that often involves alcohol and a blow on the head, and forced to work for their king. Other hire on a ship to earn a little money. When „freshly“ brought to the ship, the sailors are called

landlubbers and are unable for any more complex work, while the general term for sailor is Jack Tar.

Sailors go through a short training in which they learn to operate the rigging of the ship and some fundamental fighting skills. They are constantly guarded by the boatswain. Their life is surely not very easy and many die of undernourishment or in accidents that are quite common on a ship.

During a fight the sailors form the bulk of the fighters.

Although sailors rarely do have a uniform as regular troops have, most share the same outfit. This consists of a broad brimmed hat, that is tarred, hence the name Jack Tar. They wear black vests and trousers, often also tarred to make the water-proof, and a white shirt. Many sailors wear a pigtail, that sometimes reaches below the belt.

The most experienced sailors may become mates one day. These mates fulfil special tasks and have command over a number of other sailors. A mate is for example responsible for a single sail.

Ship's Gunner

A variation of the sailor is the ship's gunner. These people are only present on ships with cannons or mortar.

They are under the direct command of the Gunner, when operating the cannons or mortars, although they are treated as ordinary sailors outside combat. Among the sailors, they are respected and are generally held in higher esteem, than the ordinary sailor.

The work of a ship's gunner is difficult and dangerous. Directly in front of him is the weapon, that often has the tendency to backfire or cause havoc in another way, while he is also the preferred target for almost any attack from other ships, being it sharpshooters or the enemy's cannons.

Most of the ship's gunners suffer from loss of hearing and damaged backs and rarely does a gunner reach ages over thirty.

Ship's gunners have the right to receive one and a half pint of alcohol a day, 50% more, than the ordinary sailor.

Soldier

Soldiers can be normal soldier, that were trained on land and later transferred to a ship. These do not possess a special training for naval warfare and the boarding of ships.

Since this became obvious, most nations have begun to train soldiers especially for naval warfare. These are the marines. They possess a fighting spirit and unity that is only paralleled by elite land units. They are specially trained and are often the first to enter another ship and the last line of defence.

The sailors are a little suspicious towards soldiers, especially land troops. This has two reasons: First of all soldiers are different from sailors and hardly understand something of navigation and therefore have a lot of free time, while the sailors have to work. Secondly soldiers on a ship mean, that the ship is guaranteed to participate in a fight.

The attitude towards mariners is about the same. Although they enjoy a much higher respect and are often feared by the ordinary sailors, a mariner onboard also means that a strong enemy is guaranteed.

Soldiers or marines are often placed on a ship to protect it -from its own crew. After numerous outbreaks of mutinies on ships, the owners have begun to hire troops to protect the ship, its cargo and the officers against any mutinous sailors.

Pilot

Pilots are responsible for bringing a ship through hazardous waters. Sometimes a navigator may be called a pilot.

A pilot is basically a very experienced helmsman, that has an intimate knowledge of the water along a coastline or near a harbour. He is taken aboard from a small ship and then takes the command of the ship.

Although he is not really a member of the crew, he shall be discussed here. When a pilot is present he has the absolute command over a ship and only the captain may revoke his orders, although this is rare and foolish.

On the other hand he is responsible for any damage during his presence. Pilots became common in the Old World about four hundred years ago, when the sea-trade saw its first boom. It became apparent, that some coastal water were quite hazardous to foreign ships and that the next tide may change the conditions considerably. Therefore experienced people, often local fishermen, were employed to direct a ship through the waters into or out of the harbour.

Later, a guild of pilots formed in which all local pilots were organised, and which also conducted the training.

Pilots are among the most respected people on a ship and also consider themselves to be much better than any captain. There was more than one instance in history in which a pilot has left the ship in the middle of hazardous water, because the captain began to question his decisions.

How many sailors do I need?

The number of sailors, that a ship requires varies very much, depending on the type of ship, its use, the size, the number of sails, etc.

As a rule of thumb, the following can be considered. Decreasing the number of men by 10% will not have great influence on the ship, the same is true for increasing it by 10%. For any 10% below that, the ships speed is decreased by 10% if it is a sailing ship and 15% if it is a rowing ship (rounded down) and the effectiveness of its weapons. For every 10%

above 110% of its standard crew, the ship gains 10% speed with a maximum of 20% for sailing ships and 30% for rowing ships.

Every cannon needs at least four people to be operated. For every four cannons an extra person is needed to carry missiles and powders from the storage to the cannons. The same applies to the mortar.

Every ship has to have a captain, someone who is responsible for everything and has command. On smaller ships, the captain can also fulfil the task of navigator and boatswain. A surgeon is generally not needed, but may be an investment into the future. A cook is not needed, but it may have a big impact on the morale, if the men only get cold beef and dry biscuits. Officers are generally not needed.

For every 30 men I consider a boatswain or a mate to be useful, although a specially charismatic or authoritative captain can make them obsolete.

A navigator is useful, but anyone with the basis of cartography and navigation can fulfil this task, therefore the navigator does not need to be an officer. A helmsman is only necessary on bigger ships, that need a number of men to operate the rudder. On smaller ships, the helmsman operates the rudder by himself and often is also the navigator.

Sailors are important on every ship. Rowing ships do not require more than ten sailors, that have to moor the boat and do the day to day task. For every sail present I consider five sailors to be the minimum, when the sail is fore-and-aft rigged. Square rigged sails need at least seven people. These numbers are average, so bigger sails may require up to fifteen people to be operated, while small sails may only require three men. Please note that these numbers refer to sails and not masts. A mast may have up to ten sails, on large galleons, and therefore require up to forty men.

On rowing ships oarsmen are vital. Every oar needs at least one oarsman. Larger oars may require up to four men. As a rule of thumb the oars on a bireme require two men in average,

while the oars on a trireme require three men in average.

Soldiers, artillerists and similar people are only optional and the mission of the ship decides their need.

Much to the horror of most captains and admirals, a ship hardly consists of a crew coming from one nation. Instead it is often a wild mixture of people from all over the world. This of course is often the reason for trouble on a ship.

What do they cost?

What a seamen earns very much depends on the ship on that he is employed.

A sailor on a military ship, will get no more than 5/- and solely relies on the prize money, while even the captains get no more than 1GCs and they have, contrary to the sailors, pay for their own food.

On a merchant's ship, the payment is about two to three times higher, depending on the success of the merchant.

Hiring a crew

A crew can be hired in a number of ways. The easiest is to get into the next seedy tavern in port and ask around. This will certainly get some sailors, but often of dubious skill and experience.

Another way, frequently used by navies, is to visit the local prisons and ask for any volunteers. The disadvantage with this tactic is that there must be the reason why the people sit in prison and probably not all where just put into jail to get sober.

A third way is to shanghaied the crew. This method is named after a small village near Middenheim that is called Schangheim. After the Empire's draftsmen have forced the whole male citizens to „join“ the navy, the female part of the village began to riot, marched to the harbour and burned there ships before they were allowed to return with their husbands, fathers and sons. Yet to draw a sailor by violence or threat is still called after this village. Shanghaied sailors are often the least trustworthy and those that have the tendency to mutiny. The groups that recruit sailors in this way often come from the local garrison and are called pressgangs.

These three ways of „recruiting“ people are only used for ordinary sailors. Finding gunners, marines, navigators and similar people that have to be more skilled is much more difficult. Anyone looking for these people is advised to visit the harbourmaster and ask for ships that have just sailed into harbour and have dismissed their crew. Other ways of course would be to hire young inexperienced sailors and hope that they learn fast before their skills are really tested.

NAVIGATION

„You see the star over there Pierre? Now you take this compass in your left hand and the staff in your right. Tell me what you see.“ „The star is at an angle of 23 and the compass tells me that it is in north-west direction.“ „Correct. Now write this in that table and do the same with the bright star over there. Very good. Now you have two points and three angles, right. The two stars, the angles of each star over the horizon and the angle between the two stars. Now tell me how to calculate a triangle?“ „Hmm, you said that a triangle in a three-dimensional space is calculated by the sentence of Relue. That means, that we should be south of this peninsula and the distance to the peninsula should be twenty-three kilometres in south-eastern direction.“ „Very good. Your teaching is finished for today.“

- a navigator teaching his apprentice

Navigation is one of the most difficult things for any ship. On land, the wanderer can use rivers, cities, hills and mountains to determine his position. Even if he is wrong and has lost his way, it is normally easy to find people, that know the area, either by chance or by following a river, which will eventually lead to a city or a village.

The game is different on the waves. While navigation within sight of the coastline is relatively easy, it is extremely difficult once, the land can no longer be seen. The position is of course important for many reasons. First of all a ship, no matter how big, cannot carry supplies for an almost endless journey on the waves. Secondly sailing into hostile waters is dangerous and more than one merchant has found himself on the shores of Araby. Therefore navigation has become a vital science and every nation tries to develop new instruments that help their ships to navigate.

History

In the beginning navigation was nothing more than educated guesses. Since ships were mostly rowing ships, that hardly ventured into the open sea, navigation was done with the help of the coastline. The instruments used for navigation

were ordinary maps of the coastline or books, called coursebooks, that were handed down and copied from generation to generation and told of winds and days of travel in one direction or the other.

The few ships that made their way into the Great Western Ocean often sailed for months and sometimes even years before coming back and their captains could tell tales of wondrous lands, but were unable to tell even the vague position of these lands.

In these days, the elves were the only race, that had already developed instruments and maps, that directed their course, but they enviously kept them secret and did not share them with humans.

After the ships became more sea-worthy and the first merchants wanted to trade with far-away places, the need for navigational tools appeared. These first tools, were crude maps and simple instruments with which the navigators were supposed to be able to determine the position of the ship and its course.

During this time all nations began to send out prospectors and surveyors to measure the coasts and gather the knowledge of the local fishermen. However many of these attempts were later cancelled and the results were far from exact. Also the nation did not want to share their knowledge with the others, in the hope to gain an advantage in the next conflict.

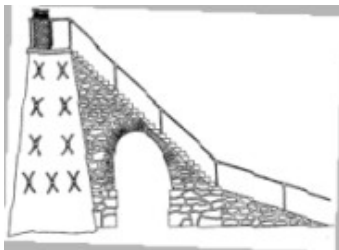
It was not until six hundred and fifty years ago, when the high-priestess of Verena, Paulina Magnusdottir, one of the few rare Norscan in the cult, ordered an expedition to sail the coasts of the Old World and bring back a picture of these coasts. A year later the expedition set sail in Marienburg under the command of Asleif Ulricson, a compatriot of Paulina. Asleif was chosen because he was the captain of the largest longboat that offered enough room for a surveyor, and because the longboat had enough trained sailors to defend itself against pirates and other dangers of the sea. The expedition took four years, in which Asleif measured the Old World from the north to the south, including the northern coast of Araby. Upon return to Marienburg, Asleif and

his men had gathered enough information to paint the first exact map of the coasts of the Old World. This map is still kept in a temple of Verena and even today used as a pattern to create new maps. The map, which is often called the Great Map or the First Map, is still the most exact map available, although many details were incorrect.

After this first map appeared the first ships were brave enough to venture further south, still along the coasts, and the first maps of the Southlands, the Dark Lands and Cathay began to appear. Never again was an expedition launched with such an ambitious aim, today a number of maps exist, that help the navigators to find their destination.

Lighthouses

A pretty primitive way of navigation, that is nevertheless very effective, is the use of lightfires. Since time immemorial were fires places along ports or shallows to warn ships of the danger. They were only used during fog or a specially dark night.



ancient lighthouse near Remas

Later, when the sea trade became more important, the first lighthouses were build. These looked like towers and on their top was a platform where a

fire was set during the night or during difficult weather. This basic design is still used, although today most of the lighthouses use oil instead of wood and mirrors to amplify the light of the fire. Some also have glass around the top, to protect the fire from the wind and the weather.

Lighthouses are often set near straits or bays, the best example being the Manannspoort Sea near Marienburg, that looks like a fire circle during the night.

Yet lighthouses also have a different purpose: that of an outlook. Some lighthouses,



„Firegallow“

especially near the borders are equipped with large telescope to sight enemy fleets before they reach the cities and harbours. They also often carry weapons, mostly trebuchet and mortar, that can be used to prevent enemies from entering a strategically important straits or harbours.

The best example of this are the lighthouses placed at the mouth of Manannspoort Sea, that almost appear as strongholds and have the purpose to defend the mouth against any hostile ship.



Lighthouse (near L'Anguille)

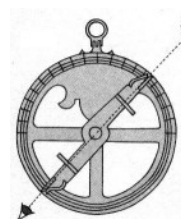
Not a lighthouse in the strict sense of the word, but nevertheless similar to a lighthouse are buoys.

These are often placed near the entrances of a harbour and have the function to tell the captain of a ship were shallows and the shipping lines are. In times of war these buoys are often removed in the hope to trap the enemy. They however do not replace a pilot, since many shallows move too fast and cannot be marked with a buoy.

Instruments and the sky

Since only few ships ever leave the relatively safety of the coastline the maps is still by far the most important instrument of navigation. However on the sea, especially on the Great Western Ocean, maps are often useless. No tree or hill or bay can tell the navigator where the ship is and experience has proven that the navigator's intuition can hardly replace a more exact way of navigation.

Therefore sailors began to look for ways to determine their position. The easiest and, as it



Astrolabium

has proven, most exact was directly in front of their eyes: the sky and stars. For hundreds of years people were gazing in the sky to find out about the future. Civilisations, that were long lost and forgotten have left traces of the sky and the position of the stars. They only thing that had to done, was to find

out if and how the stars move and record these movements. After the first more or less reliable maps of the stars appeared, the ships were able to sail in a fixed direction without the help of a coastline.

This however did not mean, that the ships were able to determine their position on the sea and to find out if they had sail north or south to reach their harbour.

After the Arabs were driven out of Estalia around one thousand years ago, they had left numerous records behind. Some of these records showed advanced mathematics and introduced the concept of zero to the Old World nations.



Bretonnian cross

Within these records were also descriptions how a position can be determined in a room with three dimensions. Since the sea already sets the position on one axis, only two other were necessary. During the following years, mathematicians began to develop methods to determine these other two axis.

After the first reliable sky maps appeared they could achieve, what was necessary to determine a position. To do this, an instrument was used that became known as Verena's staff. This staff is formed like a cross. By pointing the staff at



Manann's scale

the stars, two co-ordinates could be get, that allowed a navigator to determine the position in the room by putting down the angles. Later other instruments were developed, that offered higher accuracy and were easier to use, but still had the same principle. This allowed the navigators to determine their position pretty exact. The latest in this row is called Manann's scale and is the most precise, but also most expensive navigational instrument available.

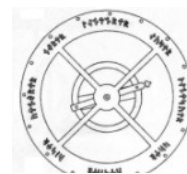
Today these instruments are widely used on sailing ships. Even though the Verena's staff is surpassed by all the other instruments, it is still



Verena's staff

the most widely used, mostly due to its low price and because it is very easy to use.

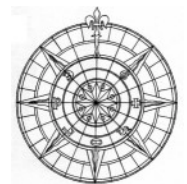
Although these navigational instruments were very helpful in the development of the open sea navigation, they still had one disadvantage: they could only be used during the night. During the day the sun moves too quickly and using a Verena's staff with the sun can lead to a circular course. Therefore another way was needed to determine the direction of the ship.



Norscan Compass

Although long known by the Norsemen and the Arabians, the Old World nations were proud to use this knowledge. The Norsemen and the Arabians discovered independently from each other a black stone, that had the strange quality to point in the same direction, when it floated on water. Since none of these civilisations knew why, the stones were considered to be magical and holy stones of the god(s).

After some time Marienburg pragmatism had triumphed over Old World prejudice. It was then, that the first compasses were „reinvented“, since every Marienburger was quick to point out, that such a bright idea could only have come from Marienburg and that their compass had not only nothing to do with the instruments used by the Norsemen and the Arabs, but also were much more precise.



Marienburg Compass

The second step in navigation was made, when the first ships began to measure the sea. This has led to more precise maps, since now it was possible to put in islands, shallows and reefs into a map. Before that it was only possible to give a vague distance between two points.

The first ways to measure length on the sea were by using a rope with knots tied at regular intervals. Together with a hour-glass, the navigators were able to determine the speed of the ships and thus measure the distance travelled before the ship reached an island or a coast. Most ships today use the rope, which is

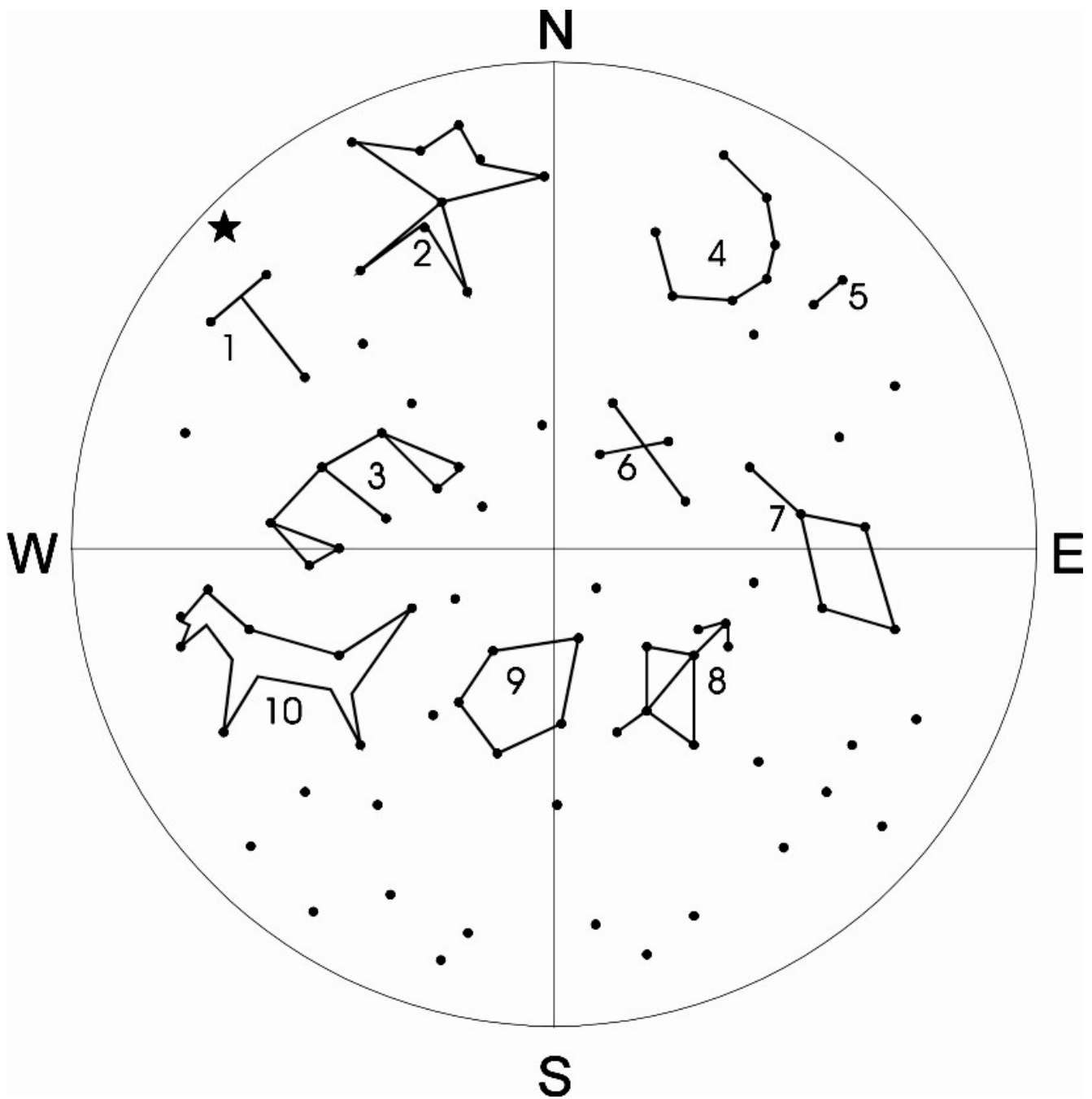
called a log. The navigators often lower the log two or more times a day and put the measurements into their maps. The speed is therefore given by the number of knots within a fixed period of time, generally within a minute.

Another navigational instrument is the sounding line. This rope with a weight on one end and knots at regular intervals is known till

time immemorial. Although looking primitive, no artisan has found a better way to measure the depth of the sea.

To measure the depth, the weight is lowered into the sea and the knots are counted before the weight reaches the bottom of the sea. This instrument is often used by ships that steer to a beach in order to avoid the ship to run on ground.

The sky map



This is the most recent and precise star map, made by Giovanni Gian Lucca of Miragliano. It depicts only stars that are used for navigation or have a religious meaning. As it was proven it is not useful south of Araby, since there the stars have another appearance, a fact, that hints towards the influence of Tzeentch in these regions. During the year, the stars move counter-clockwise. This is the position of the stars on the first of Nachexen.

★ Is the only star, that does not move. It can always be found in north-east and is used to determine the course during the night. It is often referred to as „The Navigator“.

1 Sigmar's Hammer: When Mannslieb is in this sign, it is considered to be a good day for fights against chaos. The dwarves called these stars Gnorri's Hammer. Outside the Empire, the sign has no meaning and is often not even considered a sign.

2 Morr's Raven: This sign is considered to represent Morr. every soul that dies when Mannslieb is in Morr's Raven is thought to be resurrected from the deaths.

3 Verena's Scale: This sign is considered to represent Verena and justice. When the sun is in this sign, the legal year starts. It is also the day, when new justices are appointed.

4 The Snake: This sign has no special meaning, except for some charlatans.

5 The Twins: This sign represents two Bretonnian heroes, that, as legend tells us, lived at the beginning of time and cleared the land, that is today called Bretonnia of all monsters and beasts and thus made Bretonnia possible. After their death, Morr has put them into the sky as guardians over Bretonnia. When the sun stands in this sign, the king of Bretonnia is crowned. Outside Bretonnia, this sign has no meaning.

6 The Cross: Followers of Ranald consider this sign to represent the symbol of Ranald, the crossed index and second finger. Others call this sign the cross, but connect no special meaning with it.

7 The Chariot: Some astronomers consider the chariot to be the symbol of warfare. Should the sun ever stand in this sign, the nations will break apart and war will spread. Followers of Khorne and Khaine take this symbol to represent their deity.

8 Myrmidia's Shield and Spear: This sign represents Myrmidia. When Mannslieb stands in this sign it is considered to be a good day for naval warfare. The temple of Myrmidia in Magritta appoints new clerics, when the sun stands in this sign.

9 The Circle: The Circle has only meaning to the followers of the Old Faith, who think, that it represents the circle of life. The other cults often point out, that the rather dim stars, that form the circle, show, that the influence of this faith is rather low.

10 The Wolf: This sign represents Ulric. In Norsca the new year begins, when the sun stands in this sign. All other nations do not connect a special meaning with this sign, except as days specially holy to Ulric.

TYPES OF SHIPS

Here are a number of typical ships, that are the most commonly encountered. In the appendix A are the stats of the ships.

Note, that no ship is like the other and there exist variations and possibly more types of ships. Detailing them, would surely break the limits of this little work.

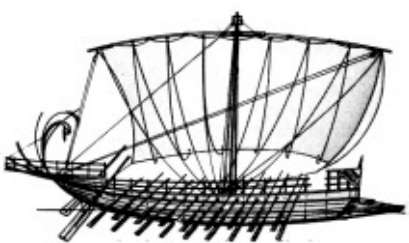
Galley

Galleys are the masters of the sea. They are large seagoing vessels propelled primarily by oars in battle and equipped with sails for cruising.



Trade Galley

The first galleys were developed in Araby and the Southlands. No traces are left of these galleys, but some scholars from the university of Luccini argue that it was primarily used for transportation and that the first galleys resembled simple large rowing boats. Other scholars, most notably the famous Hans Spökenkieker from Nuln, however argue that the first galleys were used by the elves in their explorations to the Old World and the Southlands and that the concept was later just copied by the Arabs.



War-galley (bireme)

Today galleys are generally classified as uniremes, with one deck of oarsmen (picture above), biremes (picture left), with two decks of oarsmen, and trireme, with three decks of oarsmen. The largest have up to four men on one row and reach a speed of up to 17 kilometres per hour.

All war galleys have the ram in common. The ram is either above or below the waterline and the main weapon of attack for any galley. It is normally made of iron or copper, although a trireme has been sighted with a ram made of pure gold, that is rumoured to be the personal vessels of an Arabian king.

Galleys have a rudder, that sits on the sides of the ship. The larger galleys have one on each side. This requires one or two helmsmen.

Besides the bireme and the trireme, we know of even larger ships. Records speak of ships with ten banks of rowers and more that need up to two-thousand oarsmen. Yet we do not know if such ships were really used in combat or just a ceremonial barks. The only precise records we have are from a forty banks galley. The records speak of a ship 150 metre long, 21 metres wide and 28 metres high, which made this galley dangerously top-heavy. It had a minimum crew of 7250 men, of which 4000 were oarsmen.

Longboat

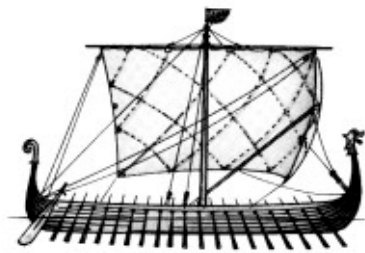
For centuries the sight of the Norscan Longboats (also called Dragonboats) have struck fear into the heart of man. These are fast agile ships, loaded with a group of warriors.

They very much resemble galleys with their oars and the square rigged sail. However longboats have a number of advantages to galleys. First off all they are slim, which gives them a speed exceeding that of a galley. Secondly their draught is much less, than the draught of a galley, which further increases their speed and allows the longboats to sail up rivers and beaches.

The biggest disadvantage of a longboat is the lack of a ram. Although the speed of a longboat is fast enough for an effective use of a ram, the boat is much too fragile and would possibly break.

Longboats often have a carved head, that depicts sea-monsters (imaginary or real) and gave the boat its name.

Besides their use for warfare, many longboats are used for trading. Compared to the size, the longboat can carry a considerable amount of cargo, although this makes the longboat extremely clumsy and difficult to navigate.



Norscan Longboat

the north coast of the Empire. However longboats are known to venture as far as Tilea and the inhabitants of these lands do not enjoy the effects of an alliance.

After the Empire has made an alliance with Norscan, the sight of longboats have become quite common along

Longboats are surprisingly sea-worthy and the remains of Norscan colonies have been found as far as the New World. Elven history speaks of many longboats that have reached the High Elven kingdom, although few are known to have returned.

Longboats, similar to galleys, have their rudder on the side of its hull.

Cedrak

The Cedrak is a ship, that is only rarely used in the Old World. It has its origin in Araby and especially the Southlands, where it is used as a transport and a battle ship.

It is one of the most underestimated ships in the Old World and every sailor is quick to point out that a ship made of reed without any keel is hardly able to cross even a lake. However the inhabitants of the Southlands have used it before the Empire even existed and obviously never found a reason to change the design.

The earliest records of the Cedrak can be found in Cathay, which is an example of the seaworthiness of the Cedrak.

The original design of the Cedrak is made of reed, that is bound together. During the last hundred years, more and more Cedraks have

appeared that are made of wood, rather than reed, although both types have similar qualities. The cedrak is built in an almost infinite number of versions, from small fishing boats with a single mast, to large five masts giants. The sails are normally fore-and-aft rigged, although they may also be lateen rigged. The cedrak has a single rudder on the back, that is operated by a tiller, that is a beam running horizontally from the rudder blade into the ship/boat.

The biggest disadvantage of the Cedrak is its rather fragile hull. Although wet reed is far more stable than wood and hardly ever breaks, a galley can rip the bundles of reed quite easily. Another disadvantage is, that the structure of the ship, that often has no stable deck, cannot support any weapons, with the exceptions of light ballistas.

Skiff

The skiff is a large lateen rigged vessel. It is mainly used for trading and warfare. In a way it is an all-purpose ship.

The skiff is a common sight along the coast of the Old World and the most common ship built in Bretonnia and Tilea. It is mostly suited for quiet waters and can get into problems in a storm.

The skiff is one of the most difficult ships to navigate, much due to the rigging and the size of the skiff. Although the lateen rigging can be problematic to ships of this size, it has the advantage of a simple rigging and a high speed.

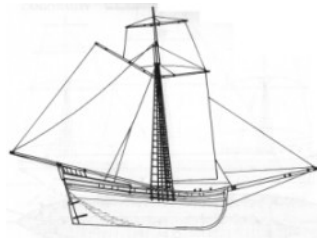
Skiffs have a single rudder on the back, which is operated by a single tiller.

Skiffs are very popular among pirates, since they provide room for men and booty, as well as manoeuvrability to outrun most other ships, with the exceptions of the galleys. The major disadvantage is its inability to carry bigger weapons.

Sloop

The sloop, also called yacht or schooner, is a ship that is mostly built in Marienburg and the

Wastelands, where the design was originally developed.



small sloop

Sloops have a single, fore-and-aft rigged masts, although sloops can be found that have as much as three masts. They are surprisingly fast and due to a low draught

can pass over shallows easily. The biggest disadvantage of the sloop is, that strong winds often bring it into problems.

The biggest advantage of the sloop is its manoeuvrability, especially with the wind. Another advantage is their low price and that it only requires few men to operate, which made it the perfect ship for trading with the smaller harbours, since the sloop had only little room for cargo.

The sloop is frequently used by pirates, due to its agility and its low draught. It is also quite easy to conceal in a bay.

The most remarkable feature of the sloop is its long bowsprit, often almost as long as the hull, which allows an enormous amount of sail in relation to tonnage.

Knorr

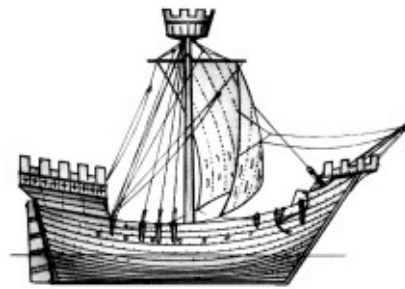
The Knorr is a sturdy merchantman. It is clinker built, decked and is steered by a large rudder oars on one side of the ship. It has a single square rigged mast.

Traders of all classes own these vessels. They are particularly good at trading to areas with poor port facilities, since their rounded bottoms and shallow draft allows them to be beached on a falling tide without damage.

Cog

The cog is the most common merchant's ship in the old world. Although it is clumsy and difficult to navigate, the cog has enough cargo room to make trading profitable. All of the more important merchants have a small fleet of cogs, that are used for the daily trading.

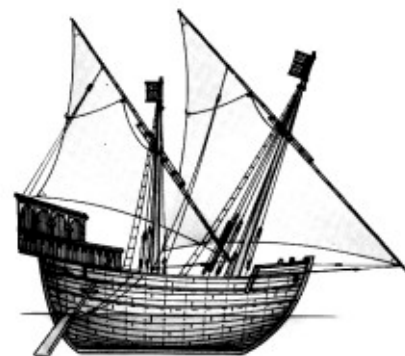
Another advantage of the cog, is its relatively low price and the few men it only requires.



Tilean trading cog

Most of the cogs are square rigged (see above), although there are also cogs with a fore-and-aft or lateen rigging (see below). The latter being fast, but requiring more men. This makes fore-and-aft rigged cogs to the choice as a transport for troops.

With its high sides the cog can survive even a grown out storm. With the recent development of keels, the cog is today able to cross the Great Western Ocean, although it is still a risky business.



Bretonian trading cog

Cogs are the most frequent ships along the western side of the Old World. In the south only galleys rival them since the winds in the south of Tilea make the cog slow.

Cogs either have their rudder on the side or at the back. The rudder at the back has the advantage, that it is much easier to operate and can be operated from below the deck. However it has the disadvantage, that it can only be repaired in harbour and a cog with a broken blade is doomed.

Caravel

Many consider the caravel to be nothing more than a large cog. Even though the caravel is certainly based upon the cog, it has many differences.



Marienburg ocean trading caravel

First of all, the caravel often has more masts than the cog. A cog generally has no more than two masts, while most caravels have at least three masts.

The sails are a combination of square and fore-and-aft rigging, with the former being the main sail. Also the keel is often much stronger and supports the ship much better, than the cog. Compared to a cog, a caravel is more expensive and requires more men, while at the same time not giving much more room for cargo.

Since the caravel has also very high sides and that combines with the keel, the caravel is often used for trading and transporting to far away places. It is also often used for explorations.

Most nations of the Old World today have a number of caravels for warfare. Here there are mainly used as transports, while galleys are still used as pure battleships.

Barque

Classifying a barque is difficult, since it exists in a number of different configurations, that seem to have little in common.

Originally small rowing ships were called barques. However after a long process of development, barques are today often identified as ships with three masts, of which the front two masts are square and lateen rigged, while the last (mizzen) mast is fore-and-aft rigged. There are however a number of small barques

with just one masts, that is lateen or fore and aft rigged.

The barque is used throughout the Old World, but is exceptionally common with the few ships, that form the Empire's navy. Yet most nations have begun to use the barque frequently. The only exception to this seems to Marienburg, that prefers the brig, although the brig is clearly inferior to the barque.



Single mast barque (Empire)

The biggest advantage of the barque is its slim and slender hull, which gives it considerable speed. With the different possible configurations, the barque is also a very flexible ship, and a configuration can be found for almost any task.

Carrack

The Carrack is a design developed out of the caravel. It is longer and wider and has more masts. The basic design is pretty similar and the carrack shares the rigging with the caravel, although it often carries more masts or sails.

The carrack is often used for trading with far away places, since it is very sea-worthy. The other important use for the carrack is as a transport. Many navies maintain a fleet of carracks to transport troops or the sovereign and his household.



Bretonian Carrack

The biggest disadvantage of the carrack is, that it is often very unbalanced. In even mild wind, the carrack can lay onto the side. This makes navigation pretty difficult.

Today carracks are rarely used as true battle ships. Their biggest military importance is as bombards. These are heavy and slow ship, that

are equipped with a mass of mortars and are primarily used to attack fortifications and harbours. In such a role, the carrack does not have to move very much and simply has to deliver its fire.

Cutter

The cutter was originally a fishing boat. This is still its primary use. However it became apparent, that the cutter is surprisingly agile. This fact has led to the deployment of cutters as scouting ships and expedition ships.



Imperial Scout Cutter

To be useful for these tasks, it was necessary to build bigger cutters. While the original design rarely had more than one fore and aft rigged masts, the later designs had two or more masts. However these developments have

proven to be inferior, since the more sails were bought with less agility. Therefore most shipwrights went back to one mast versions or cutters with two masts. Still the sails were fore and aft rigged.

The cutter is one of the most common boats on the sea, especially on the coast of Bretonnia, the Wastelands and the Empire the cutter is mainly used for fishing. The Empire sponsors the building of cutters under the premises that they are used as troop transports in times of war.

Brig

The Brig is a two-masted ship. It has a fore and aft rigged mainsail, while the other sails are generally square rigged. Besides this, there are a number of different designs, that feature different rigging, especially square rigging.

The first brig was developed in Marienburg and is still mainly build there. It much resembles the caravel.

Outside Marienburg the brig was never successful, mostly due to the fact, that it is smaller than a caravel or a carrack, while more



Marienburg Brig (square rigged)

difficult to sail. At the same time the brig has less speed than these ships and more draft.

Galleon

The galleon is a relatively new design. It is a development based upon the caravel. About fifty years ago, the first galleons left the harbour and they were the first ships, that could be mounted with the heavy mortars.

A galleon can be mounted with nearly any number of masts and the king of Bretonnia is rumoured to own a galleon with seven masts, although, as any shipwright is quick to point out, such a ship would easily capsize due to the mass of sails. This may be the reason, why no one has ever seen this galleon.

Galleons are quite rare, since they are expensive and require many men to be navigated. No nation of the Old World is



Bretonnian war galleon (ship of admiral Dubuor)

known to posses more than two or three galleons, and these are taken as the admiral's ship. As far as it is known, merchants do not posses any galleon, since the price is too high and the ship has too little room for cargo, considering its size.

A galleon is able to cross basically any ocean and, armed with mortars and ballistas, is able to

stand against any opponent, possibly with the exception of the large triremes of Araby.

Catamaran

When the first catamarans appeared in Marienburg, the shipwrights laughed at them, not believing that such a ship could swim. However they quickly learned, that a catamaran is superior to many ships.

The original design for the catamaran was developed by the elves. It consists of two small and long parts, that are connected by a deck of wood. The catamaran generally has a single mast, that is either lateen or fore-and-aft rigged.

The ships requires only few people, seldom more than ten, and is mainly used for scouting.

Catamaran warships have not been seen in the harbours of the Old World, but no one knows, what the elves are building next.

The biggest advantage of the catamaran is its speed, that is unmatched. The speed is much higher, than it can be explained with the hull, the sails and the oars. Rumours persist, that the catamaran is in any way enchanted and does not even touch the water, but move through air, a few fingers above the waves. Besides this it hardly has any advantages. The ship that were seen in the Old World harbours were often too small and fragile to support any weapon, other than mounted crossbows. It has almost no room for cargo. It is difficult to navigate and expensive.

TACTICS

„We have only little information on what has happened, since the few sailors that survived gave contradictory information. What we know is that the two fleets, both consisting of more than twenty triremes and biremes, steered into each other. We have no knowledge who destroyed more ships in this first contact, but we know for sure, that for some reasons the galleys were unable to row back and were caught with each other. The next seconds are unclear: One sailor said that a wizard began to cast fireballs, while others say that a powder magazine exploded. We know that somehow both fleets were set on fire and since the ships were floating next to each other the fire must have spread very fast. The few people on the coast that watched the battle saw fire jumping from ship to ship until the whole sea seemed to burn. A day later were the first corpses washed to the beach, all of them horribly burned. As far as we know only twenty-one seamen have survived out of more than seven thousands.“

- extract from the investigations after the third battle of Remas (commonly know as the Tilean bonfire)

Rowing Ships

Galleys being relatively unseaworthy, war at sea is almost always near land. The most destructive weapon of a rowing ship is a ram in the bow, which dictates a line abreast as the tactical formation. In the line abreast, two lines of opposing galleys approached each other head on, with the ram of each vessel unobstructed by the ships on either side. Momentum is the key to the ram's destructiveness, so that sprint speed - as much as seven or eight knots (13 to 15 kilometres per hour) - is as important as manoeuvre. Multiple banks of oars afford speed, and the geometry of their arrangement fascinates naval architect-historians.

Rams can be used in two ways. The most obvious is for destroying the hull of the other ships, after which the galley is rowed backwards to avoid to break the ram. The second tactic is to manoeuvre the galley over the oars of another ship. Therefore before a galley rams another ship, the oars are generally lifted to avoid their destruction.

The rams are made of metal, often iron or copper. Often it is an artwork of its own, depicting sea-monsters, gods, teeth or other picture, that may be appropriate to stir fear into the hearts of the enemy.

In the beginning of naval warfare galleys were simply used as platform upon which warriors stood. Except for the ramming attack, the captains did not develop any tactics. Instead any ship that could not be sunken was boarded.

Besides the ram, the most important attack of a galley are from the warriors, often archers and a group of soldiers for boarding.

After the alliance of man and dwarves the first ship weapons began to appear. In the beginning these were smaller versions of the catapult, that hauled rocks to the other ships. The biggest disadvantage of the catapult and later of the trebuchet was, that it was slow to reload and far from precise. Later a Tilean engineer by the name of Marcello de la Rosa developed the first ballista. The ballista resembles a large crossbow and its missiles were much faster and also more precise than the rocks hurled by a catapult. However the damage inflicted by a ballista upon another ship was only minimal and the weapon is too clumsy to used against individual targets.

It took another fifty years before the captains began to use their ballistas to catch another ship. Even though this was a dangerous attack, since a „hooked“ galley could chose to attack the attacker, it has proven to be successful, at least against smaller opponents.

The next step was a spiked bridge, that was thrown on another ship and used for boarding the enemy vessels, virtually tying the two ships together.

It was not before two hundred years later, that an Arab by the name of Mustafah el Chalif found a mixture of tar, sulphur, oil and sawdust, that burned at a considerable heat and was fluid enough to spread a carpet of flames. After it was introduced in the Old World it

became known as the Heretics Purification, although it is commonly referred to as „Hasan Roasted“. It quickly became one of the most feared weapons in naval warfare.

A few years later the major cults of the Old World have, in a rare act of unity, banned this weapons from all battles between upright people, that is battles not against chaos or the Arabs. However the ban was not very successful since no captain wanted to give the opponent an advantage.

The only reason why it is only rarely used is, that it is pretty dangerous to the user, at least as dangerous as to the opponent and more than one ship has set itself on fire. The second disadvantage is, that it can only be fired from catapults and therefore shares all disadvantages of a catapult.

Catapults, ballistas and trebuchets are often mounted in the stern of the ship. The only place that is pretty easy to use and still allows the galley to use its ramming attack.

Another invention came from the dwarves. After they had experimented with cannon for some time, they have begun to develop a short barrelled cannon, nicknamed mortar. These heavy cannons could be mounted upon ships and fired by a crew of experienced gunners. The biggest problem with the mortar is, that the backfire is often strong enough to blow the mortar right through the hull of the ship. It is also quite an expensive weapon and needs a trained crew.

Cannons are also used as weapons on ships today, especially sailing ships (see below). On rowing ships, cannons are always mounted into the stern and are used similarly as the ram, the only difference being, that they are fired before the ships close in. Cannons could not be fired from the sides, since these were the places, where the oarsmen sat.

The exception to the above are the longboats. Except for a mounted crossbow, longboats do not have any weapons. Therefore the most

commonly encountered tactic is either boarding the enemy or to outrun it.

The most feared weapon in naval warfare are magicians. Especially elementalists can turn the scale of combat very fast, when they begin to manipulate wind, summon elementals and turn the wood of a ship into stone.

The presence of a magic user certainly can decide a battle. However such a ship also inevitably draws the attention of the enemies.

The above is only the history of human naval combat. We can be certain that the elves used much more elaborated tactics than we did. Although the catamarans that are seen on the shores of the Old World rarely carry weapons we know of stories about elven naval battles. As it seems they either have weapons they are not willing to show us or the use magic-users much more frequently for combat than we do.

Sailing ships

Sailing ships are in many ways similar to rowing ships. In combat however they have the disadvantage of the sails. That means, that sailing ships cannot have a catapult or a trebuchet, since such a weapon and its missile is often entangled in the rigging and the sails.

Therefore the ballista is the only real ship's weapon on a sailing ship. It is generally mounted to the stern, where it can be fired unhindered from the sails and the rigging. Catapults and trebuchets are sometimes mounted on a sailing ship, but are difficult to use. Cannons mounted in the stern are often called hunting cannons, since they are made to fire at a fleeing ship.

With the development of larger sailing ships, the first true naval tactics began to develop. While the galleys were just steered right into the enemy, sailing ships rely on wind. Therefore the ships are eager to get the wind into their sails.

These tactics however still had very little to do with tactics and were more the search for the perfect wind.

Since sailing ships depend on wind, the ram was no longer useful. In the famous battle of Remas in which a fleet of three Arabian trireme clashed into a fleet of twelve Tilean sailing ships, the difference between the two types became apparent. While the trireme headed right into the Tilean vessels, the sailing ships were desperately trying to catch some wind. Before the sailing ships began to move a few inches three were cut in half. Only one sailing ship was able to escape the triremes by sailing away from the coast into deep water.

This battle was the first blow to sailing ships in battles and the blow was so severe that most nations abandoned sailing ships and went back to using rowing ships, especially Estalia, Tilea and Araby. Today sailing ships are mainly used for reconnaissance and exploration, while galley do most of the fighting. However recent innovations of long range cannons have shifted the tide in favour of the sailing ships again, that can now wait outside becalmed bays while delivering their fire. Yet these weapons are still in their infancy and not very precise at the moment.

Today sailing ships are mainly used by merchants and explorers and not as battle ships. However this has changed a little bit with the invention of the mortar and the cannon. The first attempts had the cannon mounted in the stern of the ship. This was the place, where a firing cannon hardly affected the stability of the ship. Later the first tests were made with cannons mounted on the port or starboard sides of the ships. However it still had a problem, that the firing of multiple cannons can unstable the ship considerably, while at the same time giving any galley an exceptional vulnerable target.

Other disadvantages of cannons include their heavy weight, which make them difficult to sight without highly skilful piloting of the ship,

and the immense backfire of a cannon, which, weakens rope and chain and risks the cannon rocketing straight over the deck and into the water through the hull.

The third disadvantage, that any gunpowder weapon has, is, that they are loud and lead to serious problems for the sailors and especially of the gun crews, that often suffer from loss of hearing.

Combination is the key

Today the biggest battle ships are neither rowing ships nor sailing ships. Instead they combine the two. This has created biremes and triremes that have one or two masts and generally a square rigging.

This allows the ship to sail much further into the ocean and at the same time be a platform for archers and battle engines. The most important advantage however is, that such a ship can increase its speed considerably when the wind is right and therefore inflict much more damage with the ram.

Protection

With the growing importance of sea trade, it became necessary to protect trading ships. Since equipping them with weapons or marines meant a loss of room for cargo, the first convoys were introduced.

During times of war, nearly every merchant ship is protected by a battleship, normally at least five merchant ships are put together under the protection of one or two battleships. During times of peace, merchant ships are only protected in three cases: Firstly when they carry especially important goods, secondly when they venture into pirate infested waters and thirdly when they pay for the protection. House Fooger in Marienburg gives 15% discount on all insurance, should a battle ship or part of a convoy protect the vessels.

SHIP COMBAT

*They need some kind of distraction
We can given them that
And they kill if they only had something to kill for
They die if they only have something to die for
They cheer if they only have something to cheer for
We can given them that
So it's off to war we go
Bring out all the flags
Fight the good fight
- New Model Army „Spirit of the Falklands“*

Below is another section with ship combat. This is a much more complex version, while this part should include the combat for those preferring the fast pace of WHFRP. Which you prefer is up to you.

The following is orientated to the rules given on page 76f of the WHFRP rulebook, with the exception, that ships are generally not treated as prone target.

Attacks

Ships can be attacked in various ways: ramming, missile fire, fire, gunpowder weapons, etc.

All ships are more or less invulnerable against hand-to hand weapons, unless a fighter spends an awful amount of time hacking the ship to small pieces, and ordinary missile fire. Of course the GM is free to allow firing at a single rope, that keeps the mizzen mast and makes it collapse.

On the table below is the effective strength for the various weapons, for range refer to Appendix B2.

Rams have an effective strength of 20, while spurs have an effective strength of 17. The catapult and the trebuchet have an effective strength of 10, while the trebuchet has a longer range. The ballista has an effective strength of 8. Cannon and mortar both have an effective strength of 14. These numbers only refer to effective strength against ship; should an oarsman be directly attacked with a ram, there is little he can do, except dodging.

The toughness differs on every ship, while the hull provides a reasonable amount of protection, the oars and the rigging are pretty weak.

Lightwood (e.g. spruce) has a toughness of 6, while heavy wood has a toughness of 8. Airis has a toughness of 10. Metal plates on the hull increases the toughness by one. A ram or spur increases the toughness on the stern by one. Oars have a toughness of 4, even if they are plated with metal, while the rigging has a toughness of 5, since it is much more likely to bounce the projectile. The bonus for ram/spur and metal are not cumulative, but alternative

Light wooden hulls have 25W, heavy wooden hulls have 35W and Airis hulls have 45W. Spurs and rams increase the W by 5 on the bow. Metal Plates increase the W by 5. The bonus for metal plates and spur/ram is alternative, not cumulative. Oars have a W of 10, while rigging has a W of 20

To destroy a part of the ship, 10 points of damage must be inflicted for every 4 metres by 4 metre section of the ship. Should 10 points of damage be delivered to a single mast, the mast is useless and crashes on board. Should the hull suffer 20 points of damage, there is a 20% chance, that it will sink. For every additional 10 points of damage, the chance raises by 10%.

The destruction of oars can be avoided, by ordering them to be pulled up. This takes one round and a successful attack is then directed against the hull. Rigging can also be saved, but it takes 3 rounds to lower all sails and a successful Rigging test of the crew.

Before a ship can deliver its attack, it is necessary to determine which ship goes first. To determine this every captain has to do a Pilot Ship test, modified by the handling of the ship. The captain with the best success attacks first. If you want to include the weather, refer to the weather table below and its effect with the different kinds of rigging, modifying the test accordingly.

For critical hits refer to Appendix B4.

Repairing

After every battle it is time for the carpenter to inspect the ship and repair parts of the ships,

that are destroyed or damaged. It takes one hour to repair 2 points of W, if the ship has the necessary material (which all ships have unless, they are piloted by a scrooge captain). If a single part has suffered more than 10 points of damage, it takes 12 hours to repair it.

ROLEPLAYING SHIP COMBAT AND SHIPS IN GENERAL (OPTIONAL)

The following should outline combat with ships. Compared to Man o' War by GW the rules are a little bit more detailed, since they were developed for using small battles and not grown out naval wars.

All of the rules below refer to ship combat only. Therefore the hitpoints are not applicable should a brave warrior attack a ship with his sword. For playing out combat man versus ship refer to the damage stats of the materials involved. For combat of individual characters against each other (e.g. with missile weapons) refer to WHFRP page 126.

In appendix A2 are the combat stats for the most common ships. Other stats can be developed by the method above.

Ramming

The most common attack for a rowing ship is ramming. To do this, most rowing ships have a ram or a spur mounted to the bow. Ramming is quite easy, the only thing the captain has to do, is to steer his ship right into the opponents ship. To attack the captain or helmsman has to make a successful test on Rowing or Pilot Ship. Ramming is only considered an attack when the ship has a ram or a spur, otherwise it is called colliding.

Before a ship can ram effectively, it has to gain speed. The maximum speed (called battle speed) is given in appendix A2. To increase the speed from cruising speed to battle speed the oarsmen simply have to row faster. A ship can increase its rowing speed with 2 per turn, if the oarsmen pass a joint rowing test. The battle speed can only be held for three hours, therefore it is not possible to cross the oceans at full speed.

Should the crew not be complete it takes longer to reach maximum speed. For every ten men below standard crew the maximum speed is decreased by 1 and the maximum increase of speed is 2 per turn minus 1 for every ten men below the standard crew.

Should the crew have more men than necessary, the maximum speed is increased by 1 for every ten men above the standard crew, up to a maximum of four (there simply is not enough room). The maximum increase of speed is 2 per round plus 1 for every ten men above the standard crew with a maximum of 8 per round.

When the ship rams the target, damage is inflicted in the following way: A ram inflicts 2W20 hitpoints of damage. A spur inflicts 1W20 hitpoints of damage. Should the speed be less than $\frac{3}{4}$ of battle speed the damage of a ram is halved and that of a spur is reduced by 25%. Should the speed be below half the battle speed, the damage of a ram is one third of the normal damage and the damage of a spur is half of the normal damage.

All damage is dealt to the hull or the oars (choice of the captain). A successful ramming attacks require a roll on a 1D100 against 20% to avoid sinking. A successful attack with a spur require a roll on a 1D100 against 40% to avoid sinking.

Should the ship loose all Oars W on one side, the rowing speed is reduced to 25%, should it loose all oars, it can only be sailed.

The target ship can prevent or reduce the ramming attack. To do this the captain has to make a successful Pilot test against the Initiative of the attacker, and the oarsmen/sailors have to pass a joint Rowing/Sailing test. When they both pass the tests, the ship has slipped out of the ramming attack of the attacker and the attacker has to turn the ship in order to attack again. If only the oarsmen/sailors have passed their Rowing/Sailing test, but not the captain, the damage is only halved.

Range Weapons

All range weapons are used in the same way as weapons on land. Note that archers can only attack the ship unless the arrows are set on fire. Attacking the crew requires a free line of sight.

Also note that crewmen are often concealed, refer to WHFRP page 126.

Ship weapons like the ballista, the catapult and the trebuchet require the appropriate skill to be operated effectively. Mounted crossbows are heavier versions of a crossbow and can be operated with the Specialist Weapon Skill from the rulebook.

Any missile attack from ordinary bows, crossbows or powder weapons is heavily influenced by the wind. Every test is therefor modified by the modifier given below in the weather chart, except that missile weapons do never get a bonus. Catapults and trebuchets do not suffer from these modifiers.

Another disadvantage besides the often heavy wind, is the fact, that ships are often apart from each other and therefore it is extremely difficult to shoot at another ship and hit precisely.

Arrow fire against the hull is useless and the Hull W is not reduced. Fire from a ballista against the hull inflicts 1D4 W and results in a caught ship. The ships are then tied together until the rope is cut of. The attacker can attempt to pull the target with appropriate strength or rowing tests. The use of ballistas or arrows against the rigging or the oars is almost useless and for ease of use, the inflicts no damage.

Catapults and trebuchets inflict 1D10 W against either the rigging or the hull. Hits against the hull have the 50% chance of punching a hole into the ship, which requires a 1D100 role against 100 minus 5% for every point of damage inflicted to avoid instant sinking. Should the ship not sink immediately, it will do so in 20 rounds minus 1 round for every point of damage. The sailors can prevent sinking by closing the hole, which takes half the rounds, that it would otherwise take to sink the ship. If a carpenter is present, the time is 25% of the time it would normally sink

E.g. A ship receives 8 points of damage. It has a 50% chance of a hole in the hull. Should a hole been punched, a role has to be made with a chance of 60% (100-8×5) to avoid instant

sinking. If the role is successful, the ship will nevertheless sink in 12 rounds (20-8). Closing the hole takes 6 rounds (12÷2) or, if a carpenter is present 3 rounds (12÷4).

Hits against the rigging mean, for every 10 points of damage, that the sailing speed is reduced by 10% until the rigging is completely destroyed. The ship can then only be rowed. Should the ship loose the number of rigging W divided by the number of masts, it means, that a whole masts collapses and the ship loses speed divided by the number of masts.

E.g. a ship has 80 W of rigging and three masts. Should the rigging suffer 26 W on the rigging, it will loose one masts (80 divided by 3 is 26,6 rounded down). Should the normal speed of such a ship be 15 km/h it will be reduced to 5 km/h (15 divided by the number of masts is 5 km/h for every mast).

Heretics Purification and Fire

Probably the most feared weapon, with the exception of magicians.

Fire works on the sea similar to fire used on land (WHFRP page 80). However there are a few differences. The first is that wind, water and rain can extinguish burning arrows. Every arrow has a 5% chance to be extinguish before reaching the target. This is increased by 10% for every wind level (refer to the weather table below) above 4.

The use of heretics fire is especially dangerous to the user, almost as dangerous as to the opponent. When loading or using any weapon, that uses heretics fire, the operator has to make a dex-test with -20 unless the operator has Specialist Weapons - Incendiaries or Ships Artillery. Failure means, that the user drops the bowl of heretics purification. The chance of breaking and setting the ship on fire is 40%. Every following round in heavy weather (wind above level 4) there is another 40% chance that the bowl rolls over the deck and breaks.

Fire can be used against the hull or the rigging. Against the hull refer to WHFRP page 80 for the damage done. Used against rigging, fire is

much more dangerous and inflicts 2D6 points of damage ever round (instead of the 2D4 for fire used on land). Every round there is a 10% chance, that increases by 5% every following round, that dropping parts of the rigging set fire on the hull.

Extinguishing fire on the hull is similar to extinguishing fire on land, with the exception, that enough water is available. Extinguishing fire on the rigging on the other hand is much more difficult and only 1W for every second round can be reduced by beating and drowsing, except when the ship is sinking in which case it does not matter if the fire is finally extinguished.

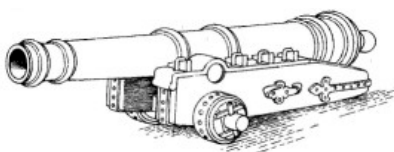
Gunpowder Weapons

The most recent development in naval warfare were the introduction of gunpowder weapons. Many saw them as the finishing blow to galleys and the final raise of the sailing ships, however this has proven to be wrong.

This has two reasons: Firstly gunpowder weapons on a ship are pretty dangerous, secondly they are not half as effective as their cousins on land. The latter is because they are often lighter versions and not very precise against fast moving ships, like a galley for example.

Today we have at least two different kind of gunpowder weapons, that are used on ships. The first kind is the cannon.

The cannon is basically an ordinary cannon, that is used on land, and later transferred to a ship. Most of the cannons are built in the stern of a ship, so that the basic tactic resembles ramming.



ordinary cannon

Although there are a few ships, mounting cannons on the sides of a ships

has not been put through. On galleys they are basically impossible to be mounted on the sides, either you lose valuable oars or your

oarsmen get deaf and can no longer understand commands. The mounting on the sides of a sailing ships is possible and many ships exist, that have the cannons on their side. However this requires a pretty wide ship, that again is slower.

However the use of cannons could be the final blow to galleys and the first step of success of sailing ships in naval warfare.

The second kind of gunpowder weapon used on ships is the mortar. This weapon is much more widely used than the cannon.

Basically the mortar is a short barrelled cannon. Opposite to the cannon it does not fire in a more or less straight line, instead it fires its projectiles up into the air and they describe a curve before the (hopefully) hit.

Compared to the cannon, the mortar delivers its backfire vertically, instead of horizontally, and the first attempts of the use of mortars have seen the weapon to rocket straight through the hull and into the sea. To prevent this the decks below the mortar are reinforced and often filled with sand, which of course gives the ship a deeper draught and less agility.



swivelling mortar

The biggest problem with the use of the mortar however is, that it is very difficult to aim. Since the projectile describes a curve, the correct usage requires a lot of measuring (guessing) of the

distance to the target.

The advantage of the mortar compared to the cannon is, that it is often constructed in a way, that allows it to be turned on a small platform, thus delivering fire in all directions, while a cannon is more or less fixed.

Both kinds of gunpowder weapons can fire different kinds of projectiles. The most common are the massive iron or lead balls, that have the purpose to smash through the hull of the other ship, while possibly setting something

on fire due to their considerable heat. Other kinds of projectiles included two balls chained together, that are used against rigging and sails, while two balls that are connected with a bar serve the same purpose.

A third kind, that is newly invented is to use balls filled with Heretics Purification. Although this is a great idea, it has its problems. The most challenging is to make balls, that withstand the velocity in the barrel without breaking apart and at the same time getting smashed when they hit the other ship. The uses so far have been disastrous and Bretonnia has lost three skiffs in the testing of this new weapon.

Although gunpowder weapons will certainly get a more bigger meaning in the future, they currently have problems in real naval warfare and are more or less exclusively used for attacking cities or forts.

Normal iron balls inflict 1D10 damage to the hull or the rigging. The procedure is, the same as for the use of catapults or trebuchets. The exception is, that every hit on the hull has a 3% and every hit on the rigging a 5% chance of causing fire. Balls that are chained together or connected with a bar cause only 1D8 points of damage on the hull, but 2D10 points of damage to the rigging. Balls filled with Heretics Purification inflict the damage outlined above, they however have a 30% chance of exploding in the cannon plus the chance of failure outlined above.

Loss of men

Of course damaging a ship, also means that the crew is wounded by tumbling masts, snapping oars or explosions. To avoid calculating the effects on every single seamen, I suggest, that for every 10 points of damage done to the ship, the ship loses 10% of their crew. For every ten points of damage done with a ramming attack, the target loses 25% of the men and the crew of the attacker has to make a T-test or lose 2 W for tumbling over the deck.

Boarding

The final stage in almost every combat is the boarding of the enemy's vessels. This is also often the most dangerous manoeuvre within a fight.

To board another ship, the attacker has to come in contact with the other ship. It requires a successful Pilot test of the commander to get the ship next to the other one, without wrecking it. A failure means, that both ships suffer 1D5 points of damage.

When the ships are next to each other, the work of the marines begins. The attacker is considered a prone target, while climbing over the reeling, which gives the defender the standard +10 modifier on his attacks. Secondly when the ship has a platform on the stern or the aft he has the advantage of the ground; giving him another +10. The best tactic is thus to support the boarding party with mounted crossbows and archers.

When the boarding party is on the other ship, combat continues as normal. All combatants (except for archers) suffer a general -10 malus, due to the difficult ground they are fighting on. Defenders in a fore- or aft-castle are considered to be partly concealed and any attack (including missile attacks) is modified by -10.

Detailed Combat (more optional)

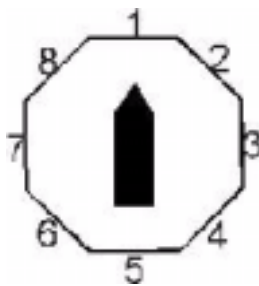
The following rules are purely optional and for those, that wish to incorporate more complexity into their campaigns. It is suggested to use miniatures on a hex-chart.

Compared to the above said, not all sails work in the same way. The three types of sails, lateen, fore-and-aft and square, have different advantages, depending on the direction of the wind. When simulating the influence of wind, first a roll on the weather table should be made to determine the strength. The maximum speed mentioned in Appendix A2 can only be reached at a wind level of 5, for every wind level below 5, the maximum speed is reduced by 20%. Every level above 5 does not increase the speed, but less sail is needed to reach the speed

and the captain can chose the most effectively rigged sails.

After determining wind speed, the wind direction is rolled. To do this roll with a 1D8, with 1=North, 2=Northeast, 3=East, 4=Southeast, 5=South, 6=Southwest, 7=West, 8=Northwest. In every second round roll again with a 1D8, with 1-6=no change, 7=one „shift“ clockwise and 8=one „shift“ counter-clockwise on the compass rose.

To get the direction of the wind relative to the ship, refer to the following graphic:



1 is against the wind, 2 is close to the wind, 3 is wind abeam, 4 is wind stern, 5 is with the wind or running fore the wind, 6 is wind stern, 7 is wind abeam and 8 is close to the wind.

Square rigged sails only provide maximum speed if the wind is coming from 4, 5 or six. If

the wind is coming from 3 or 7, the speed is halved, if the wind is coming from 1, 2 or 8 the sails are useless unless the ship has oars, that may bring the sail into position 3 or 7. If the sail is not lowered, when wind is coming from 1, 2 or 8, the ship loses speed with 25% per round and begins to move backwards, in which case the rudder is useless.

Lateen and for-and-aft rigged sails, get the maximum speed, when the wind comes from 3, 4, 6 or 7. The speed is reduced by 25%, when the wind comes from 5, 2 or 8. When the wind comes from 1, the sails are useless, but a ship with lateen or fore-and-aft rigged sails, can cross the wind, which requires a successful Pilot test, to bring the ship close to the wind.

The ship can try to lower sails in order to eliminate their negative effect. For example a galleon can lower its square sails and leave only the lateen or fore-and-aft sails up. Every changing of sails takes 3 rounds unless the crew passes a joint Rigging test, in which case the time is reduced to 2 rounds.

WEATHER

„Son, some may say that the monsters are the biggest danger to a sailor, while others say it is the captain. Yet there is something even more unpredictable than any monster or officer: the weather. You can love it or hate it, but you surely cannot live without it. All I can tell you is to keep a look to the sky.“

- a retired boatswain gives an advise to his son

„Damn motion sickness!“

- last words of a Middenheim merchant before disappearing above deck

The weather is one of the most important and also most incalculable aspects of navigation. This is not only true for sailing ships, but also for rowing boats, that everyone, who ever stood in a storm can approve.

Even though weather is unpredictable, it is also vital for travelling the sea, especially for sailing ship. Manann may show his kindness during the summer, but he is quick and merciless to punish those, that go to far. No blessing and

prayer can stop his fury, once it is enraged and he will not calm unless he has taken his toll.

While the wind along the coastline of the Old World is more or less constantly blowing from an eastern direction, mostly from south-east, it can change radically once someone has reached the open sea.

When the wind begins to blow and the first crests begin to appear, even the bravest sailor feels the need to pray to the gods.

The following table is a rough guideline, with which the GM should be able to determine the general circumstances of the weather.

It can be used in two ways. If you want to detail ship combat, you should role before combat and decide who has the weather gauge. You can also use this table to determine the difficulty of certain actions, that take place while the PCs are on a ship (e.g. rescuing Karl-Franz, who fell into water). The test is then made with the modifier given below.

Roll (1D100)	Wind	Speed	Effects	Modifier	Level
01-06	Calm	0-2 km/h	no sail movement	0	0
06-14	Light Breeze	3-16 km/h	none	+10	1
15-29	Good Breeze	17-32 km/h	none	+5	2
30-50	Strong Breeze	33-48 km/h	20% chance of rain	0	3
51-64	Heavy Breeze	49-59 km/h	40% chance of rain	-10	4
65-73	Light Gale	60-72 km/h	50% chance of rain	-15	5
74-85	Moderate Gale	73-80 km/h	60% chance of rain	-20	6
86-90	Strong Gale	81-105 km/h	70% chance of rain	-25	7
91-94	Heavy Gale	105-115 km/h	80% chance of rain, sails have to be lowered*	-30	8
95-97	Storm	116-125 km/h	100% chance of rain, sails have to be lowered*, ships begin to take water	-40	9
98-100	Hurricane	126+ km/h	100% chance of rain, sails have to be lowered*, ships have a 30% chance of capsizing per turn	-50	10

* Should sails not be lowered there is a chance, that they get destroyed. The chance is 20% plus 10% for every next level of wind per round above level 8.

All rolls on the above table are modified by the following:

Time of the year	Location
Winter +20	Sea of Claws +5
Spring +10	Southern Sea +0
Summer +0	Tilean Sea -10
Autumn +10	The Black Gulf +0
	Middle Sea +5
	Great Western Ocean +0

The modifiers for time of the year and location are cumulative. Therefore sailing on the sea of claws during the winter results in a modifier of +25

All physical test (e.g. climbing, melee) have to done with a negative modifier of -20 in level 6 wind plus -10 for every level above level 7 (e.g. climbing in a level 8 wind is modified by -20 (for level 6) plus -20 (for levels 7 and 8) thus the test is made with a modifier of -40).

CAMPAIGNS ON SEA

There are many possible reasons, why the PCs may want or have to go to the sea. The most ordinary being transportation, since no other way of transport is as fast and as safe as by ship. Although sailing is in no way safe, it is much safer than land transport.

However there are situations and possibilities where a campaign can have a closer connection towards the sea, than just ordinary transport.

The following ideas, are by no means complete and the GM should see them as nothing than ideas and inspiration. Besides these rough idea, a small adventure is detailed below (Appendix H), that can be used as an introduction to ships, as well as a sidekick in a longer campaign.

Piracy and Privateering

The PCs may come in the situation, where they want to raid other vessels. The main choices are piracy and privateering. While piracy is a crime throughout the Old World, privateering is slightly different. Basically it is piracy with a special license, called a Letter of Marque.

The advantage of privateering is, that the PCs have a safe port of call and that they can hope to get protection and/or support from their lord. The disadvantage however is, that the PCs have to give a share to their lord, which should be between 10-20% of their gross „income“. Another disadvantage is, that the PCs are not free in choosing their prey, instead they are normally only allowed to raid ships of certain kingdom's enemies. Another disadvantage is, that allies between the kingdoms may change easily and that a privateer may therefore lose his Letter of Marque, should he attack a ship, that is now considered allied, but was hostile a month ago. This can turn a privateer into a pirate pretty fast.

Privateering was historically quite common and had a number of advantages for the king. Since the privateers are not regular troops, it is rather easy to deny any knowledge and any involvement is much more difficult to trace back to the king. Also it is quite easy to drop the

privateer should it become necessary. Thirdly the privateer has to pay for his troops and the ship and thus the king does not have to fund him.

Piracy is basically the same as privateering, except for the Letter of Marque. Compared to a privateer a pirate can keep all booty, that is normally divided evenly between the crew, with the exception, that the captain and officers get a bigger share (about 5 times of what the crewmen get). Piracy shall be discussed later in more detail.

Adventure Hook

While the PCs travel with a ordinary merchant ship, stuffed between bag of herbs and crates of tools, when the ship is suddenly attacked by a small pirate vessel. Since the merchant's ship has no armaments except for a number of melee weapons the pirates board it. The fact that the ship has no especially valuable already point to the fact that the pirate is at the beginning of his career. The crew of the merchant is given the choice to be either left at some distant shore with nothing than the hope to be found or to become part of the pirate's crew. This can lead to a campaign of swashbuckling and adventure.

A possible modification of this hook is that the PCs were hired by a merchant (e.g. Kuypers of Marienburg) or an official to find and reconnaissance this pirate. In this modification the pirate is not at the beginning, but in the zenith of career. The PCs then have to find the hideout and the informers of the pirate and get back to their client to deliver the information. They can then either get their payment or send to search and destroy the pirate and get a higher payment.

Voyage and Expedition

Ships are an easy, although somewhat expensive, way to travel. It is also a method of transportation, with which many places can be discovered, that are not accessible by horse.

The most prominent places are Lustria or Nippon, that can only be accessed by ship, unless someone is willing and stupid enough to wander through the Dark Lands. Besides these places, there are many white spots on the map, that may be interesting to learn more about.

Those looking for rare artefacts or fabulous treasures may want to set sail and risk life and limb in the search for ultimate wealth. How likely it is to find something is up to the GM, since rumours of fabulous wealth spread faster than wind and have about the same substance.

The biggest problem for the PCs may be to fund such an expedition. Unless they have raided Altdorf, it is fairly unlikely that they can fund it themselves.

Therefore, they have to find other means of funding. One, that was already detailed, is by the emission of share on an exchange (see Marienburg: Sold down the river). This method is not half as easy, as it may sound. The investors are pretty careful in which exploration they may invest and it is rather unlikely, that they invest in an expedition lead by a group of unknown people, who are not known to be skilled seamen. The hardest part would be to convince the investors to put their money into their expedition.

Should the PCs be able to emit shares, all they get is money. So they still have to find a ship, a crew and supplies.

Another possibility of funding is by merchants. Especially the great merchants of Marienburg are known, to support expeditions, although they demand a pretty high share, which should be around 50% of the gross „income“, and the exclusive right on the information, the PCs have gathered. The historical example for this are the East Indies Company and the Hudson Bay Company.

Again this is not easy. The PCs have to convince the merchant of the success of such a journey. Just pointing out some rumours, is not enough. Also the merchants have often much more detailed information on the prospect of

such a voyage. Thirdly merchants are uninterested in finding a lost civilisation, unless it promises some profit.

Merchants are generally not giving the PCs a fully equipped ship. They only pay for the ship or part of the ship. This payment can include that all bills are paid, to a fixed sum, with which the PCs have to buy everything. The only difference between these two methods, is that the second method may require the PCs to haggle a lot and be satisfied with inferior material.

The third method of funding is through a king or a state. People such as Columbus historically used this method.

The first problem in this method is to have access to the throne or the closest advisors of the king or head of the state. Of course having success here may stir the envy of other court favourites and it is not unlikely, that someone else may have exactly the same idea a week after the PCs announced their and mysteriously gets the funding, the PCs were hoping to get.

The next step would be to explain a certain goal. Exploration for the sake of knowledge may sound as a good aim, but the kingdom or state often calculates in much more worldly currency and expects at least wealth, if not new land or power.

Even if the PCs are able to get royal funding, they are not relieved from any problems. Besides an advisor, that can get an annoyance, who has to ensure that the crown gets its share and keeps a close eye on the PCs, it was quite common to split commands. This could mean, that the PCs are given a small unit of soldiers, that are exclusively commanded by a royal officer and who is jealously guarding his position. Splitting commands on the other hand is the first step on the road to failure.

The GM should stress the downsides of this method. It should not be easy to get royal or state funding. Even if the PCs are able to get it, it should be apparent, that there are a number of additional problems.

What the funding includes is up to the GM. It can include a fully equipped fleet of three or four ships. It could also mean, the PCs are given only an old tub with a crew, that was drawn directly from the home of retired and incapable sailors.

Adventure Hook

Rumours can be heard in every bigger town north of Bretonnia that ships from Magritta have made their way to Lustria and were able to bring unknown, but certainly fabulous, treasure back to Magritta. The rumour also tells of a single ship that stranded on an island. Ships from Magritta can be seen much more often on the Great Western Ocean than before and they seem to search for something. The rumours reach Marienburg sooner or later and the merchants are eager to find the wreck and have access to the maps and information. To do this merchants have chosen to equip a ship and hire free-lancers (i.e. adventurers and mercenaries) to search for the ship.

Whether the rumour is true or the ship has just sunk to the bottom of the Ocean is up to the GM. However the PCs are likely to get into some kind of trouble with the Magrittan ships. Besides this there may be different groups on their ship that follow their own goals.

Trading

The third main way of campaigning on the sea, is trade. The PCs may come to the conclusion, that there must be an easier way to earn money, than enter damp old cellars and dungeons and battle monsters or chaos sorcerers.

This way of campaign is generally pretty boring and can be quite uneventful. Thus it is unlikely, that the PCs will take up the career of a trader, unless they are at the end of their adventuring career and look for a job after „retirement“.

The disadvantage of this is, that it is a financially risky business. First of all other merchants try to keep the market closed. Secondly there are virtually hundreds of small ships, that compete on the market.

Adventure Hook

The PCs have in one way or the other acquired a ship. While they set for their next adventure, they are approached by an old and strange looking man. The man, who does not give a name, asks them to transport a rather large crate from Erengard to L'Anguille. The crate is brought upon the ship in the first light of the day. He also tells the PCs not to open the crate, otherwise they are not paid in L'Anguille.

The crate can contain everything, from smuggled goods to a vampire and the PCs should get an uneasy feeling about it. Should they open it, it is full of books. Every book is clad in a cover of waterproof leather and reinforced with metal plates. The pages are made of extremely thin paper, although the paper seems to be exceptional strong. The PCs can open the books, but they may have difficulties reading them, since they are written in Old Slann.

The books are part of the Sikar-discovery mentioned in the introduction. They are nothing than a very small part of the discovery. Their value cannot really be determined. A scholar would kill for them, but it is unlikely that the PCs find a buyer on the open market. Only very few people are actually able to read them and the few that can are likely to use every mean, even force, to get them.

Military

Ships have a big importance for the economy. This is especially true for nations and kingdoms like Marienburg, Estalia or Tilea, while the Empire or Kislev have only little naval interest.

Since this importance, the countries support a considerable fleet. These fleets can be divided into two parts. A home fleet has the task to protect the coastline and harbours. There may exist a fleet of ocean-going vessels, most likely in Estalia and the Elven kingdom. The PCs may very well be assigned to such a fleet or conduct a special operation, with the task to recognise enemy fleets or something similar.

Although such fleets are likely to be closed shops, under certain circumstances, especially if the PCs have proven their skills with ships, they may be assigned to such a fleet.

Adventure Hook

The PCs are approached to accompany a person. This person has to travel from Bordelaux to Luccini. Since during this trip the ship has to sail near Sartosa the person travels on board a navy ship, preferably a fast and only lightly armoured sailing ship, like a medium sized sloop. The sailors on this ship are not very eager to share their little room with a bunch of would-be bodyguards. The first part of the trip should be occupied with coping with the crew and their rather aggressive jokes.

Although the ship tries it best pirates finally take it. The pirates seem to be aware of the passenger and after a vicious fight they kidnap the person. When the PCs finally reach Luccini with nothing than a small crew and a damaged ship they are send back to Sartosa with a disguised sloop and a group of mercenaries under their command to get the person back from the kidnappers.

The passenger can be anyone important, a rich merchant or the son or daughter of a noblemen. The outcome of the adventure can range from a romantic love story to an adventure of assassination and silent attacks.

PIRATES AND PRIVATEERS

*We will fight you in the harbour
we battle you on land
but if you meet singing pirates
they'll be more than you can stand
A pirate I was meant to be
trim the sail and roam the sea
We're a pack of scurvy seadogs
And we pity not a drum
We all like eat some garlic
and sing from the diaphragm
A pirate I was meant to be
trim the sail and roam the sea
- Guybrush Threepwood, a mighty pirate*

Piracy is an almost exclusively human phenomenon. dwarves avoid water, halflings are much too peaceful and elves, with the exceptions of the dark elves, are too organised to have a larger problem with piracy.

The reason, why someone becomes a pirate are legion. They range from the lust for adventuring to the need to escape prosecution. Often they have nothing to loose and since the piracy is punished with death, they do not have to care for very much.

Privateers on the other hand are licensed by a Letter of Marque, that allows them to raid vessels of the king's enemies. Often privateers are ex-pirates that were later recruited by a king. Although legally pirates and privateers differ, they are from the same basket.

Although pirates stand outside the law, their crew is often organised very strictly. The captain is the master of death and live. Except for the captain only the boatswain and the helmsman are of any importance, the rest fulfilling all other tasks, without having a special function. Since every pirates sooner or later wants to become a captain, mistrust and suspicion dominate life on a pirate ship. This shows, when new men join the crew; they are often beaten and abused, just to show, who is on top of the food-chain.

Pirates can most frequently be found along the south coast of the Old World. The reason for this is, that neither Tilea, nor Estalia or the

Border Princes are very stable and coherent nations. Thus the pirates do not have to fear the officials very much. This is also the region that is used by privateers, especially by privateers from Bretonnia and the Empire, that chase Arabian ships, and Arabian privateers, that do the same to Old Worlde vessels.

Piracy is considered a capital crime throughout the Old World, possibly with the exception of the Border Princes, where no one really bothers about prosecuting pirates. The sentence for piracy is always death, either by hanging or drowning. Through various royal contracts the nations of the Old World have agreed to prosecute all pirates or to extradite them. These contracts are not followed very eagerly and pirates, that are only sought by one nation may be pretty safe in another, unless they also have raided their ships.

Contrary to pirates, who can keep the whole ship and later sell it in a harbour, privateers have to bring the ship back to the next friendly harbour. This requires to send a part of the crew to the other ship, normally around 10-25% of its standard crew. In the harbour the privateer gets prize money. That is about a quarter of the original cost of that ship including its cargo. That money is then divided among the crew of the privateer, with the sailors and/or oarsmen getting 25%, the mates and NCOs getting 25%, the marines (if present) getting 12,5%, the officers getting 12,5%, the captain getting 5%, while 20% is kept to repair the ship and add supplies.

Since the payment for a seamen is pretty low, the crews are eager to get prize money.

Wreckers

An exceptional nasty form of pirates are the wreckers. These are often normal citizens, that just try to „earn“ some extra money, there are, however, also groups of wreckers, that do this as a full-time job.

Wrecking is, as any form of piracy, forbidden and prosecuted with a death sentence.

The tactic of a wrecker relies on the fact, that many ships rely on lightfires or lighthouses in difficult waters. When a captain or navigator sees a lightfire he will follow it, unless of course he knows that there does not exist one. The wreckers exploit just this trust. They set fires on cliffs or the shore, preferably near a reef or shallows. When the captain begins to follow this fire, he will wreck his ship. At this point the beach pirates either run to the wreck, if it is on the beach, or row to it with their small ships. The sailors of the ship are often much too distracted, should they not already be dead, to fully comprehend what is going on. The wreckers generally slay the sailors and take as much of the wreck as possibly.

Wreckers are even despised by other pirates and every nation does whatever it can to eliminate such practise. However, most nations shrug back from sentencing a whole village to death, even when they know, that some of them worked as wreckers. Some nations also will use the tactic of the wreckers, to weak approaching fleets.

Pirate Hunters

On the other side of the law stand the pirate hunters, although many regard them as equally bad as the pirates. Pirate Hunters are the sea-going equivalent to bounty hunters. They basically use the same tricks and tactics as the pirates do and often a pirate hunter is also doing piracy.

Pirate Hunters are often captains or mercenary that have shown their skill in the past. They are employed by the nation or king and have a similar status as privateers.

In theory they are only allowed to attack pirates, although in practise merchants from another nation may also be attacked.

Pirate hunters should not be confused with patrols. Many nations have a fleet, that has to patrol and protect the most important sea lanes. Pirate Hunters on the other hand have to search for pirates far off the normal sea lanes. The success of such a job is unlikely since the sea is big and ships move fast.

On rare occasions a pirate hunter is hired to find a specific pirate. To deserve such a treatment a pirate has to have done many raids on vessels or villages.

Hideouts

Often the biggest problem for any pirate is to find a hideout. These hideouts can be simple bays, were the booty is kept, up to small villages, were the booty is directly sold on a market.

Pirate hideouts can be found near important trading lines, but in waters that cannot be accessed by larger battleships and are difficult to be approached from the land.

Preferred locations for a hideout are the steep cliffs of Tilea, as well as the shores of the Black Gulf, not mentioning Sartosa. Northward the most likely pirate hideouts are swamps, in which the pirates can escape easily, should it become necessary.

Other hideouts are the cities of those noblemen, that tolerate or even support piracy. These are especially the cities along the shores of the Border Princes.

Tactics

Pirates tend to use different tactics, than the one outlined above. They can normally not use any tactic, that involves squadrons. Instead they often have only one ship. That makes it almost impossible to attack any fleet. Instead pirates attack merchants.

A pirate vessels will usually shoot for the rigging or attack the oars, rather than the hull and will avoid to set the ship on fire. Therefore the most common weapons are ballistas and archers. If the attack is successful, the foes is slowed down and the pirates will board the vessel. Should the pirate's vessel get damaged, it is often abandoned and the prize used as the new pirates vessel.

Pirates make every attempt to build up a fierce reputation, which often lets merchants surrender and therefore avoids any melee. Often the crew is spared to spread the tale of the attack. Only

when the opponent has put up a long and bitter fight, will he kill the crew. But even then almost always does the pirate let a few crew members alive, setting them adrift near a travelled sea lanes to spread tales of what happened to crews who resisted the mighty pirate Bloodnose.

Often pirates try to recruit men from their victims.

When a pirate runs into a navy vessel or a pirate hunter, they will fight for their lives. Since piracy is generally punished with death, they have nothing to loose. Should the pirates therefore be unable to outrun the other ship, they will avoid capturing at all cost.

On the whole, pirates use a hit-and-run tactic, which leads to boarding the other ship. Since most pirate vessels carry more men, than they need to, they often have an advantage when it comes to melee.

Another much practised tactic is to raid villages. In fact most of the pirates do not sails the seas for months in the hope to run into a merchant's ships. Instead they prefer to raid the small towns and villages along the coast.

Famous Pirates

Duchese Maria del Pietronese

Possibly the most famous pirate shall be discussed here in brief, in fact it is the offspring of a dynasty of pirates.

The Duchese Maria del Pietronese is a minor noblewoman from Tilea. Her small realm is situated near Luccini, where her famous stronghold „Il Ilflessibile“ sits on top of a high cliff. This stronghold is also the port of call of her trireme „La Nera“. Throughout the Old World and Araby her name and the name of her trireme is known and often feared.

Duchese Maria del Pietronese is the last in a line of noblemen, that have begun piracy more than four hundred years ago. All of them used a black trireme with the same name, although it is unlikely, that it is the same ship.

Her ship has two specialities, that make it different from other ships. The first is, that the

topmost of the three decks of sailors are supported by outriggers. The second, and much more famous, specialities is, that the oars have a metal blade. These oars are sharpened and used to directly attack the oarsmen and crew of the opponent. The oarsmen are known as „lancelotti“ and they are feared even among the most hardened marines. Her ship is painted in black and the trireme has a single square-rigged sails in crimson.

Although Duchese Maria del Pietronese is seen as a simple pirate by most, her personality is much more complex. Most of the time she is chasing Arabian vessels. In fact she was hired by the Grand-Theogonist after she succeeded her father, who also was hired by the predecessor of the current Grand-Theogonist. The Grand-Theogonist keeps his involvement with the Duchese Maria del Pietronese secret for the fear of causing problems with Bretonnia, whose ships are regularly raided by the Duchese.

The reason, why she was hired by the cult of Sigmar is, to have a source of information as well as a tool of influence in this region. Until now the Duchese has fulfilled her task much to the satisfaction of the Grand-Theogonist.

The oarsmen of the „La Nera“ are exclusively drawn from the villages near her stronghold. The families there see it as an honour to send their eldest sons on the trireme. The oarsmen are loyal to death and every word of Duchese Maria del Pietronese is their command.

The Duchese is a charismatic personality. Although she already is in her mid-forties, her hair is raven-black with brown piercing eyes. She is remarkably small and slender, but when on board it is clear that she has absolute command and even on land she emits a considerable amount of authority that makes even kings feel uneasy. Although she had many suitors in the past, she was never married. Thirteen years ago she bore a daughter, that she conceived from an Arab by the name Ibrahim Saddah. Her daughter Isabella often accompanies her on her journeys and is expected to succeed her mother.

Brothers of Vilus

The Brothers of Vilus can be found in the Sea of Claws and the Middle Sea and are the only group of pirates that has escaped the authorities for more than a century. Originally they were used by Marienburg in order to intervene in the ongoing confrontation between the Empire and Bretonnia while at the same time remain neutral. To protect the interest of Marienburg, which is to keep either the Empire and Bretonnia occupied, so that none of them comes to the idea that Marienburg may need another siege, the Marienburg harbour was opened for anyone who was willing to fight either Bretonnia or the Empire. During this time the Brothers of Vilus appeared, first as a loose group of privateers and later as an organised group of privateers.

After the ongoing conflict between Bretonnia and the Empire ceased and developed into an uneasy peace, Marienburg no longer needed the Brothers of Vilus. Their letters of Marque were recalled and the Brothers became outlaws. During the following years the Brothers of Vilus

began to attack any vessel near Marienburg. The authorities have equipped many fleet to find them but were unable to attack them. What the fleets were unable to do, economy was. Marienburg has improved relations with the Empire, Norsca and Albion and all these nations agreed not give the Brothers any shelter.

Unfortunately for Marienburg, Kislev was the weak spot and the Tsar has, unofficially, allowed the Brothers to set their quarters near Erengard. By doing this the Tsar hoped to weaken Marienburg and get more traffic into the harbour of Erengard.

The leading figures behind the Brothers are mostly unknown. Only Godeke Martin is a well-known and feared captain of the Brothers.

The connection with the Brothers has caused many problems between Marienburg and Kislev, but to this point it was not enough to develop into a real conflict.

APPENDIX A1 - TYPICAL SHIPS (PHYSICAL STATS)

The following table shows typical ships. Most ships are available in smaller and bigger versions and the GM should feel free to modify these stats.

Ship	Length	Width	Draught	Fore Deck	Aft Deck	Masts/Banks	Rigging	Steering	S/O/M‡
Rowing Ships									
Bireme	35	6	1-1,5	C	C	1/2	1Sq	2SO	30/110/80
Longboat (trading)	30	6	1	none	none	1/1	1Sq	1SO	15/25/#
Longboat (war)	24	5	1	none	none	1/1	1Sq	1SO	70/f/#
Merchant galley	24	5	1-1,5	none	none	1/-	1Sq	1SO	25/-/(50)
Recon Galley	26	5	1-1,5	none	C	1/1	1La	Ru	25/60/25
Trireme	35	6	1-1,5	C	C	1/3	1Sq	2SO	30/140/100
Sailing Ships									
Barque (3 masts)	35	7	2	P	P	3/-	SR, FR	Ru	60/-/60
Brig	35	8	3	P	C	3/-	SR, FR	Ru	70/-/60
Caravel (medium)	25	7	3	SP	C	2/-	1Sq, 1La	Ru	20/-/30
Carrack (medium)	30	8	3	yes	C	3/-	2SR, 1La	Ru	100/-/115
Catamaran (trade)	30	20	4	none	none	1/1	1La	Ru	25/-/#
Catamaran (war)	30	15	2	none	none	1/1	1La	Ru	30/-/#
Cedrak (medium)	25	8	2	SP	SP	2/-	1FR, 1La	1SO	40/-/40
Cog (medium)	30	10	2-2,5	SP	C	1/-	1Sq or 1La	Ru	60/-/50
Cutter (medium)	25	6	4	none	none	1/-	FR	Ru	30/-/-
Galleon	40	11	6	C	C	3/-	SR	Ru	250/-/200
Knorr (medium)	30	14	3	none	none	2/-	SR	Ru	40/-/-
Sloop (medium)	33	7	3	SP	C	2/-	FR	Ru	35/-/-
Skiff (medium)	33	5	1-2	none	SP	1/-	1La	Ru	25/-/25

SP = Small Platform; P = Platform; C = Castle

Sq = Square Sail; La = Lateen sail; SR = Square rigged; FR = Fore and aft rigged

Ru = Rudder; SO = Steering oar

‡ S = Seamen; O = Oarsmen; M = Marines (maximum number; marines includes passenger and other people carried, for every five passengers the ship can carry one horse)

entire crew is armed and will fight if necessary

f seamen can serve as oarsmen

All dimensions are in metres

APPENDIX A2 - TYPICAL SHIPS (COMBAT STATS)

Ship	Speed sailed*		Speed oared*		Ram	Hull W	Rigging W@	Oars W each side	Armament†
	L	S	C	B					
Rowing Ships									
Bireme	8	10	9	19	ram	35	40	8	ba, ca or tre
Longboat (trading)	12	18	6	15	none	25	40	5	none
Longboat (war)	15	22	8	17	none	25	40	5	none
Merchant galley	6	9	7	13	none	30	40	6	none
Recon Galley	9	11	9	20	spur	30	40	6	mc
Trireme	11	15	8	20	ram	40	40	10	ba, ca or tre
Sailing Ships									
Barque (3 masts)	10	16	none	none	none	30	65	none	mc, m/c
Brig	9	11	none	none	none	35	65	none	mc, ba or m/c
Caravel (medium)	12	16	none	none	none	30	60	none	mc, ba or m/c
Catamaran (trade)	11	18	9	16	ram	15	40	none	mc
Catamaran (war)	23	34	16	31	ram	20	40	none	mc or ba
Cedrak	10	12	none	none	none	20	65	none	mc, ba or ca
Carrack (medium)	9	12	none	none	none	30	60	none	mc, ba or m/c
Cog (medium)	8	13	none	none	none	25	60	none	mc, ba or m/c
Cutter (medium)	9	14	none	none	none	30	60	none	mc or ba
Galleon	12	16	none	none	none	40	80	none	mc, ba or m/c
Knorr	9	13	none	none	none	20	10	none	none
Sloop (medium)	13	18	none	none	none	30	75	none	mc, ba or m/c
Skiff (medium)	12	15	none	none	none	25	60	none	mc, ba

L = light wind; S = strong wind (also maximum speed); C = cruising speed; B = battle speed (for ramming attacks, can only help for three rounds)

ba = ballista; ca = catapult; tr = trebuchet; mc = mounted crossbow; m/c = mortar or cannon

@ The W of the rigging are generally higher, then the W of the hull, this should represent, that rigging does not take as many damage from ordinary fire and is more difficult to hit.

† Armaments are maximum armaments. Ships of these types that are used for fishing or trading generally will not carry extra armaments. Please note, that larger ships may carry numerous of these weapons or a combination

* The speeds are in knots (=1,852 km/h)

Appendix A 2.1 - Toughness of a ship

Type	Toughness	Wounds
Light Wood	6	25
Heavy Wood	8	35
Airis	10	45
Metal	+1T	+1W
Ram/Spur	+1T	+1W
Oars	4	10
Rigging/Sails	5	20

APPENDIX A3 - HANDLING

Rowing Ships	Handling
Bireme	0
Longboat (trading)	0
Longboat (war)	0
Merchant galley	0
Recon Galley	0
Trireme	0

Sailing Ships	Handling
Barque (3 masts)	0
Brig	-10
Caravel (medium)	0
Catamaran (trade)	-5
Catamaran (war)	-10
Cedrak	-5
Carrack (medium)	-5
Cog (medium)	0
Cutter (medium)	+5
Galleon	0
Knorr	0
Sloop (medium)	+10
Skiff (medium)	-5

APPENDIX A4 - PRICES FOR THE COMMON SHIP TYPES

Rowing Ships	Price (GCs)
Bireme	8500
Longboat (trading)	4000
Longboat (war)	6000
Merchant galley	6120
Recon Galley	6500
Trireme	10000

Sailing Ships	Price (GCs)
Barque (3 masts)	9.000
Brig	13.500
Caravel (medium)	13.000
Catamaran (trade)	*
Catamaran (war)	*
Cedrak	9.000
Carrack (medium)	11.000
Cog (medium)	8.000
Cutter (medium)	600
Galleon	20.000
Knorr	2.300
Sloop (medium)	9.000
Skiff (medium)	2.000

All ships are average prices for average ships, complete with sails and/or oars and any kind of weapons that can normally be found on such a ship.

* The catamaran is only constructed by the high elves of Ulthuan and cannot be bought. On extremely rare occasions (such as defending the home territories of the high elves single-handed against an Chaos invasion) would such a ship be given to someone not coming from Ulthuan

APPENDIX B1 - COSTS AND EQUIPMENT

Type	Price	Type	Price
Anchor (iron large)	10 GCs		
Anchor (iron small)	5 GCs		
Anchor (stone)	2 GCs	Map	30 GCs
Anchor winch	20 GCs	Mast spruce	6 GCs per m.
Ballista	200 GCs	Mast oak	9 GCs per m.
Bank (rowing)	10% of hull	Mast Airis	16 GCs per m.
Boarding Bridge	20 GCs (+5 GCs f. spikes)	Metal plating	hull +15%
Bell	5 GCs	Mortar	200 GCs
Book (logbook, etc.)	20 GCs	Mortar Ball (simple)	2 GCs
Cannon	200 GCs	Mortar Ball (chained, etc.)	3 GCs
Cannon Ball (simple)	2 GCs	Mounted Crossbow	80 GCs
Cannon Ball (chained, etc.)	3 GCs	Navigational Charts	25 GCs
Careening	5 GCs per m.	Navigational Instruments (exc. compass)	50 GCs
Castle (simple)	150 GCs	Oar	1 GC 18/-
Castle (complex)	300 GCs	Platform spruce	10 GCs/m ²
Catapult	150 GCs	Platform oak	16 GCs/m ²
Cat o' nine tails	20/-	Platform Airis	30 GCs/m ²
Compass	39 GCs	Platform (fighting)	+10% of platform
Deck	60% of hull	Powder Storage	30 GCs
Deck (reinforced)	prize of deck plus 80 GCs	Pump	2 GCs
Dinghy	prize as hull	Ram	200 GCs+
Figurehead	50 GCs+	Repair	10-50% orig. cost
Food	13/- per man per day	Rope	2 GCs per metre
Fore-and-aft sail*	5 GCs per m.	Spur	150 GCs+
Grappling Hooks	4 GCs	Square Sail*	8 GCs per m.
Gunpowder (Barrel)	100 GCs	Steering Oar	5 GCs
Hourglass	70 GCs	Steering Wheel†	20 GCs
Hull spruce	10 GCs/m ²	Sword	15 GCs
Hull oak	16 GCs/m ²	Tar (Barrel)	2 GCs
Hull Airis	30 GCs/m ²	Tiller	10 GCs
Keel	25% of hull	Trebuchet	250 GCs
Lateen Sail*	5 GCs per m.	Writing Equipment	10 GCs
Lookout	100 GCs+		

The list is by no means comprehensive and a number of times should be placed on a ship, that are not included here. For finding their prices, the GM should use the rulebook, as well as his common sense. The availability is always common in a harbour or a shipyard.

* All prices for sails, include full rigging

† Includes rudder blade and mechanism.

APPENDIX B2 - WEAPONS

Weapon	Skill*	Range (in m)			Damage			Reload	ES
		short	long	extreme	hull	oars	sails/rig		
Ballista	Spec.W. Ship Artillery/Artillery	50	100	250	1D4	none	none	2 rounds	8
Cannon@	Spec.W Ship Artilley/Firearms	100	200	500	1D10	1D4	1D10	2 rounds	14
Catapult	Spec.W. Ship Artillery/Artillery	60	120	300	1D10	1D4	1D10	3 rounds	10
Mortar@	Spec.W Ship Artilley/Firearms	75	150	600	1D10	1D4	1D10	3 rounds	14
Ram	Pilot Ship	touch	touch	touch	2W20	2W20	none	none	20
Spur	Pilot Ship	touch	touch	touch	1W20	1W20	none	none	17
Trebuchet	Spec.W. Ship Artillery/Artillery	90	180	400	1D10	1D4	1D10	3 rounds	10

* For using these weapons without the skill the BS is reduced to 10 (WHFRP page126). For using the ram or spur without Pilot Ship refer to the text above.

@ The damage listed here, applies to normal iron balls. As stated above, chained balls inflict 1D8 point of damage against the hull and 2D10 points of damage against the sails and the rigging. The range for them is only 75% of the normal range.

Using balls filled with Heretics Purification in catapults, trebuchets, cannons or mortars reduces the range by 25%. To determine the damage, refer to the text above.

The mounted crossbow can only be used against soft targets (i.e. creatures) and follows the rules for the crossbow (WHFRP page 128), with an effective strength of 5 and the range increased by 50%.

APPENDIX B3 - TO-HIT LOCATIONS

Rowing ship		Sailing Ship		Rowing Ship with sails	
<i>Location</i>	<i>Role</i>	<i>Location</i>	<i>Role</i>	<i>Location</i>	<i>Role</i>
Hull	1-80	Hull	1-65	Hull	1-50
Oars	81-100	Sails/Rigging	66-100	Oars	51-85
				Sails/Rigging	86-100

For ramming attacks, ignore all hits on sails and rigging and re-roll.

APPENDIX B4 - CRITICAL HITS

	Hull	Sails/Rigging	Oar
1-2	Your attack was not very successful, but it was enough to shock the enemy's crew, that cannot act the next round.	Besides a few holes, your attack has not caused further damage.	The oarsmen are happy to bring in the oars, but angered about the captain for 2 rounds.
3-4	You certainly left an impression; your opponent's crew is shocked for two rounds and suffers a -10 on all test for the next two rounds.	You have caused some hole, but also brought the rigging into a mess. The ship loses speed unless the rigging is brought back into order.	The oarsmen are happy to bring in the oars, but angered about the captain for 2 rounds.
4-5	Your attacks causes havoc on your opponent, he, his crew and the ship can do nothing than gently floating in the next 1D5 rounds.	You have hit a mast. Unfortunately it has not broken, but all sailors in the rigging fall like ripe apples.	Parts of the oars are crashed and the ship loses speed, should there are no replacements.
6-7	The ship loses its whole speed and is immobile until it gathers wind.	The crew, sees parts of their rigging gone and is stunned for 2 rounds.	The oarsmen lose 25% of their oars and are angered about the captain for 6 rounds.
8	Ram: you have managed to bring your ship over that of your enemy and all your men get a +20 for any boarding actions in the next 2 rounds. Otherwise: your crew gets a +10 on all actions in the next round.	A sail comes down and engulfs the whole deck. It takes 3 rounds for every sailor to get away under the sail.	The attack has not damaged the oarsmen or the oars, but frightened them and they will not continue to row in the next W10 rounds.
9	The ship loses the figurehead (-30 on all morale checks) and parts of its stern. It takes 20 rounds to make a provisory repair and avoid sinking.	A mast bends forward without braking and entangles the sails of another mast.	Out of fear, the oarsmen begin to row backwards for five rounds.
10	A hole is torn in the hull and the ship will sink in W6 rounds.	The rigging has a 50% chance of catching fire and the crew is demoralised for the rest of the battle (-20 on all tests).	A splash of water comes through the lower decks. The ship loses 50% of its speed and everyone is pumping water for 3 rounds.
11	The stern or aft castle/platform collapses and everyone within suffers 5 W and is unconscious for the rest of the day.	The rigging catches fire.	The oars become entangled and are useless for the rest of the battle.
12	You have damaged the rudder. The ship is immobile until the rudder is repaired.	Parts of the rigging crash down, which leaves the ship occupied for three rounds, after 30% of the sailors have been brought below deck.	A whole bank is torn from the ship with its oarsmen. The ship begins to take water and the oarsmen stop rowing for three rounds.
13	Your attack has caused the ship to turn heavily into the water. The crew can do nothing than pumping waters for 8 rounds and pray.	A mast falls onto the deck. Everyone on deck gets 2W, unless he makes a successful Dex-test.	At random, the oars begin to crush the oarsmen. Every oarsman has a 70% chance to die during your attack.
14	You may have damaged the kitchen. Besides an angered cook, the opponent's vessel is set on fire.	You have destroyed a mast, that takes the whole rigging with him into the water. The ship can no longer move, unless pulled.	The oarsmen begin a mutiny, that can be stopped after 10 rounds and the loss of 40% of the oarsmen.
15	Your attack has damaged the powder storage and a big explosion lets the bow of your opponent's ship turned into sawdust. (Otherwise refer to 14)	A mast collapses and destroys the deck, together with the hull. The ship sinks in W10 rounds.	The oarsmen begin a mutiny, which makes fighting with this ship impossible.
16	You have managed to split the ship in two, it sinks instantly.	You have managed to destroy the holding of a mast, that now crashed through the hull and sinks the ship instantly.	The whole oars on one side are cut off, the ship loses 75% of its speed.

The critical hit chart remains the same, refer to page 122 of the WHFPR rulebook.

APPENDIX C - PORTS OF THE OLD WORLD

Location	Pilots	Armaments	Garrison	Wealth	Dry-dock
Kislev					
Wladiwoy	no	no	100	2	no
Erengard	yes	ch, c, ca, h	2000	3	yes
Empire					
Großhafen	yes	ch, c, ca, m, h	1200	3	no
Franzenshafen	yes	no	100	2	no
Wastelands					
Marienburg	need	ch, ca, m, c	1000/2000*	5	yes
Brettonnia					
Sevancy	yes	h	200	2	no
Couronne	yes	h	500	3	no
L'Anguille	yes	ch, ca, t, c, h	4000	4	yes
Saint Philip	yes	ch, ca, h	200	3	yes
Marsallie	no	ch, h	200	2	no
Bordelaux	yes	ch, c, ca, h	1500	3	yes
D'Estali	no	ch, c, ca, h	800	2	no
Brionne	yes	c, h	100	2	no
Estalia					
Cardoza	no	t	300	1	no
Bilbali	need	ch, c, ca, t, m, h	2000	4	yes
Aroganez	need	ch, t, h	800	2	no
Mariabon	yes	ch, c, ca	1000	3	yes
Magritta	yes	ch, c, ca, t, m, h	2200	5	yes
Mont Jayme	need	ch, c	400	2	no
Tilea					
Tobaro	need	ch, t, ca, m, h	500	3	no
Miragliano	yes	ch, t, ca, m, h	1200	4	yes
Remas	yes	ch, t, h	1000	3	no
Appillia	yes	ch, t, m, h	900	3	no
Luccini	yes	ch, t, m, h	1800	4	yes
Sartosa	no	ch, c, ca, t, m, h	0/1000*	3	no
Border Princes					
Tilsp	no	no	100	2	no

The list follows along the coast from Kislev to the Border Princes.

Pilots: Y=yes, n=no, need=needed. If pilots are needed to enter the harbour they are also available.

Armaments: ch=chain, c=catapults, t=trebuchets, ca=cannons, m=mortars, h= harbourwall

Garrison: refers to the standing army protecting the harbour/city. When mercenaries are stationed, this is marked with a *

Wealth: 1=impoverished, 5=wealthy

APPENDIX D - NEW CAREERS

Here are the statistics for the careers mentioned above. Some are modifications to careers that already have appeared in the rulebook. For the descriptions refer to the text above.

I have not used the social standing rules from Apocrypha Now. The position on a ship was outlined above and fellowship tests between an oarsman and a captain rather rely on the hierarchy, that on tests.

New skills are marked with a †.

Boatswain (Advanced Career)

M	WS	BS	S	T	W	I
-	+20	+10	+1	+1	+4	+10
A	Dex	Ld	Int	Cl	WP	Fel
+1	+10	+10	+10	+10	+10	+10

Skills: Boat Building, Consume Alcohol, Ocean Lore†, Pilot Ship†, Rigging†, Sailing, Scale Sheer Surface, Secret Language - Seaman†, Ship Building†, Specialist Weapon - Whip, Storytelling, Street Fighting, 50% of Swim

Career Entries: Sailor, Purser, Gunner, Mercenary Sergeant, Militiaman, Bounty Hunter

Career Exists: Mercenary Captain, Pirate Hunter, Pirate Captain, Pirate

Carpenter (Advanced Career)

M	WS	BS	S	T	W	I
-	-	-	+2	+2	+2	+20
A	Dex	Ld	Int	Cl	WP	Fel
-	+10	+10	-	+10	+10	+10

Skills: Carpentry, Consume Alcohol, Rigging†, Scroll Lore, Scale Sheer Surface, Secret Language - Seaman†, 75% of Swim

Trappings: Carpentry Tools

Career Entries: Artisan's Apprentice, Artisan, Engineer

Career Exists: Artisan, Shipwright, Engineer

Cook (Basic Career)

M	WS	BS	S	T	W	I
-	+10	-	+1	-	-	-
A	Dex	Ld	Int	Cl	WP	Fel
-	+10	-	-	-	-	+10

Skills: Consume Alcohol, Cook, Rigging, Secret Language - Seaman†

Trappings: assortment of knives, bottle of liquor

Career Entries: Herbalist, Pedlar, Sailor, Oarsman,

Career Exists: Pirate, Soldier, Sailor

Gunner (Advanced Career)

M	WS	BS	S	T	W	I
-	+10	+20	+1	+1	+2	+20
A	Dex	Ld	Int	Cl	WP	Fel
-	+10	+20	+10	+10	+10	-

Skills: Carpentry, Consume Alcohol, Engineer, Secret Language - Seaman†, Specialist Weapon - Ship Artillery†

Trappings: Artillerist's charts and tables

Career Entries: Artillerist, Engineer, Ship's Gunner

Career Exists: Officer of the troops, Artillerist, Engineer, Mercenary Captain/Sergeant

Helmsman (Basic Career)

M	WS	BS	S	T	W	I
-	+20	+10	+2	+1	+3	+20
A	Dex	Ld	Int	Cl	WP	Fel
-	+10	+20	-	+20	-	-

Skills: Consume Alcohol, Navigation†, Sail, Secret Language - Seaman†, Ocean Lore†, Rigging†, Row, 50% of Astronomy, 25% Cartography, 25%

Trappings: Leather Jerkin, Hooded Coat

Career Entries: Mercenary, Sailor,

Career Exists: Navigator, Pirate, Pirate Captain

Marine (Basic Career)

M	WS	BS	S	T	W	I
-	+10	+10	+1	-	+2	+10
A	Dex	Ld	Int	Cl	WP	Fel
+1	-	+10	-	+10	-	-

Skills: Disarm, Dodge Blow, Consume Alcohol, Row, Secret Language - Battle Tongue, Secret Language - Seaman†, Strike Mighty Blow, Strike to Stun, 25% of Swim

Trappings: Bow or crossbow, Grappling Hook, Sword, Mail Shirt, Shield

Career Entries: Artillerist, Gunner, Sailor, Mercenary

Career Exists: Bounty Hunter, Footpad, Artillerist, Mercenary Captain/Sergeant, Slaver, Gunner

Midshipman (Advanced Career)

M	WS	BS	S	T	W	I
-	+20	-	+1	+1	+2	+10
A	Dex	Ld	Int	Cl	WP	Fel
-	+20	+10	+20	-	-	+20

Skills: Consume Alcohol, Rigging†, Sail, Secret Language - Seaman†, 75% of Ship Building†, 25% of Navigation, 25% of Pilot Ship†

Career Entries: Noble, Freelance

Career Exists: Officer

Navigator (Advanced Career)

M	WS	BS	S	T	W	I
-	+10	-	+1	+1	+3	+20
A	Dex	Ld	Int	Cl	WP	Fel
-	+10	+20	+30	+10	+20	+10

Skills: Astronomy†, Carthography, Consume Alcohol, Navigation†, Ocean Lore†, Orientation, Read/Write, Scale Sheer Surface, Secret Language - Seaman†

Trappings: Navigator's instruments, Maps, telescope

Career Entries: Helmsman, Pilot

Career Exists: Pilot, Officer

Oarsman (Basic Career)

M	WS	BS	S	T	W	I
-	+10	+10	+2	+1	+2	-
A	Dex	Ld	Int	Cl	WP	Fel
-	-	-	-	-	-	-

Skills: Dodge, Consume Alcohol, Row, Secret Language - Seaman†, Street Fighting

Career Entries: Any

Career Exists: Boatswain, Cook, Mercenary, Soldier

Officer (Advanced Career)

M	WS	BS	S	T	W	I
-	+30	-	+1	+1	+3	+20
A	Dex	Ld	Int	Cl	WP	Fel
+1	+20	+30	+10	+20	+20	+10

Skills: Boat Building, Consume Alcohol, Rigging†, Sail, Secret Language - Seaman†, Ship Building†, Strike to Stun, 50% of Navigation†, 75% of Pilot Ship†

Trappings: Leather Jerkin, Rapier

Career Entries: Noble, Midshipman, Navigator, Explorer

Career Exists: Noble, Captain, Pilot, Mercenary, Pirate Hunter, Pirate Captain

Officer of the Troops (Advanced Career)

M	WS	BS	S	T	W	I
-	+30	+30	+2	+2	+6	+20
A	Dex	Ld	Int	Cl	WP	Fel
+2	+10	+40	+10	+30	+10	+20

Skills: Consume Alcohol, Disarm, Dodge Blow, Heraldry, Ride - Horse, Specialist Weapon - Two-handed Weapon, Specialist Weapon - Flail, Specialist Weapon - Parrying Weapon, Strike to Injure

Trappings: Full Helmet, Mail Shirt, Shield, Grappling Hooks

Career Entries: Mercenary, Artillerist, Freelance

Career Exists: Freelance, Noble, Mercenary Captain

Pilot (Advanced Career)

M	WS	BS	S	T	W	I
-	+10	-	+1	+2	+3	+20
A	Dex	Ld	Int	Cl	WP	Fel
-	+10	+10	+30	+20	+20	+10

Skills: Astronomy†, Carthography, Navigation†, Ocean Lore†, Orientation, Pilot Ship†, Rigging†, Row, Sail, Secret Language - Seaman†, Swim

Trappings: Leather Jerkin, Rope with Grappling Hook, two lanterns, 50% of own rowing boat

Career Entries: Captain, Navigator, Officer, Fisherman

Career Exists: Captain, Merchant, Boatman

Pirate (Basic Career)

M	WS	BS	S	T	W	I
-	+30	-	+2	+1	+2	+10
A	Dex	Ld	Int	Cl	WP	Fel
+2	+20	-	-	+10	-	+10

Skills: Consume Alcohol, Dodge, Rigging†, Row, Sail, Scale Sheer Surface, Secret Language - Seaman†, Strike Mighty Blow

Trappings: Sword, Leather Jerkin, Grappling Hooks

Career Entries: Cook, Helmsman, Boatswain

Career Exists: Pirate Captain, Footpad, Highwayman, Outlaw, Raconteur, Smuggler, Sailor, Oarsman, Boatswain, Helmsman, Cook

Pirate Captain (Advanced Career)

M	WS	BS	S	T	W	I
-	+30	-	+2	+2	+4	+20
A	Dex	Ld	Int	Cl	WP	Fel
+2	+30	+30	-	+30	-	+30

Skills: Boat Building, Consume Alcohol, Navigation†, Pilot Ship†, Rigging†, Sail, Secret Language - Seaman†, Ship Building†, Speak Additional Language, Specialist Weapon - Blunderbus, Strike Mighty Blow

Trappings: Leather Jerkin, Jolly Roger, Blunderbus

Career Entries: Pirate, Officer, Captain, Helmsman, Boatswain

Career Exists: Pirate Hunter, Officer, Mercenary Captain, Footpad, Highwayman, Outlaw, Raconteur, Smuggler

Pirate Hunter (Advanced Career)

M	WS	BS	S	T	W	I
-	+10	-	+1	+1	+3	+20
A	Dex	Ld	Int	Cl	WP	Fel
+1	+10	+30	+20	+10	+10	+10

Skills: Boat Building, Consume Alcohol, Navigation†, Pilot Ship†, Rigging†, Sail, Secret Language - Seaman†, Ship Building†, Speak Additional Language, Specialist Weapon - Fencing Sword, Strike Mighty Blow

Trappings: Weapon of choice, Mail Shirt, Grappling Hooks, 25% of Ship

Career Entries: Bounty Hunter, Mercenary, Helmsman, Boatswain, Pirate, Pirate Captain, Officer

Career Exists: Mercenary Captain, Marine, Pirate Captain, Bounty Hunter

Purser (Advanced Career)

M	WS	BS	S	T	W	I
-	+10	+10	+1	+1	+2	+20
A	Dex	Ld	Int	Cl	WP	Fel
-	+10	+10	+20	+10	+20	-

Skills: Consume Alcohol, Evaluate, Haggle, Numismatic, Read/Write, Secret Language - Seaman†, Super Numerate

Trappings: Leather Jerkin, Prick and Cheque Book, Writing equipment

Career Entries: Merchant,

Career Exists: Explorer, Merchant

Sailor (Basic Career)

M	WS	BS	S	T	W	I
-	+10	+10	+1	-	+2	+10
A	Dex	Ld	Int	Cl	WP	Fel
+1	-	-	-	-	-	-

Skills: Dodge, Consume Alcohol, Rigging†, Row, Sailing, Scale Sheer Surface, Secret Language - Seaman†, Street Fighting, Strike Mighty Blow, 25% of swim

Career Entries: Any

Career Exists: Boatswain, Helmsman, Mercenary, Soldier, Cook

Sea Captain (Advanced Career)

M	WS	BS	S	T	W	I
-	+30	+20	+1	+1	+6	+20
A	Dex	Ld	Int	Cl	WP	Fel
+2	+30	+30	+20	+30	+20	+30

Skills: Boat Building, Consume Alcohol, Navigation†, Pilot Ship†, Rigging†, Sail, Secret Language - Seaman†, Ship Building†, Speak Additional Language, Specialist Weapon - Fencing Sword, Strike Mighty Blow

Trappings: Leather Jerkin, Telescope, Rapier, Ship

Career Entries: Noble, Officer (see below), Navigator

Career Exists: Pilot, Noble, Pirate Captain

Ship's Gunner (Advanced Career)

M	WS	BS	S	T	W	I
-	+10	+20	+1	+1	+4	-
A	Dex	Ld	Int	Cl	WP	Fel
-	+20	+10	+10	+20	-	-

Skills: Consume Alcohol, Secret Language - Seamen, Specialist Weapon-Bombard, Specialist Weapon-Firearms, Specialist Weapon - Ship's Artillery, Sailing, Scale Sheer Surface, 50% Swim

Trappings: Pistol or Blunderbuss, Leather Jerkin

Career Entries: Marine, Sailor

Career Exists: Gunner, Boatswain, Mercenary, Pirate

Serving more than a year in this career leads to loss of hearing. Characters with Acute Hearing lose this skill, other characters suffer a -10 on all hearing tests. For every following year, hearing tests suffer another -10.

Shipwright (Advanced Career)

M	WS	BS	S	T	W	I
-	-	-	+1	+1	+2	+20
A	Dex	Ld	Int	Cl	WP	Fel
	+30	-	+10	-	-	-

Skills: Carpentry, Boat Building, Read/Write, Scroll Lore, Secret Language - Seaman†, Ship Building†

Trappings: Tools

Career Entries: Artisan, Carpenter, Artisan's Apprentice, Engineer

Career Exists: Merchant, Artisan, Engineer

Surgeon (Advanced Career)

M	WS	BS	S	T	W	I
-	-	-	+1	+1	+3	+10
A	Dex	Ld	Int	Cl	WP	Fel
-	+20	+20	+20	+20	+20	+10

Skills: Consume Alcohol, Cure Disease, Heal Wounds, Manufacture Drugs, Prepare Poisons, Surgery

Trappings: Medical Instruments, Alcohol

Career Entries: Physician, Physician's Student

Career Exists: Physician

APPENDIX E - TESTS AND NEW SKILLS

Skill tests work much in the same way on a ship, as they work on land. However there are a few new tests.

All these tests are modified by the modifier given in the weather table, with the exception, that only row, sail and pilot ship can get a positive modifier.

Navigation

Navigation is a test against Intelligence. It can only be made with the skill Navigation, although characters with the skill Orientation can make the test against half their Intelligence. Should the character have Astronomy he gets a +10 modifier. The usage of navigational instruments, that also require the skill Navigation to be used, give another +10 modifier. Navigation in fog or in the mid of a storm (wind level 8 and above) gives it a -20 modifier.

Navigation should be made in secret and any decisive failure not only means, that the character has put a wrong course, but also that he is dead-certain to be on the right course.

Pilot Ship

Pilot Ship is tested against Leadership. The relevant skill is Pilot Ship. The test is necessary, when a character wants to use a ship in combat or in heavy weather. Failure of the test means, that the ship's crew does not know what to do and that the ship is immobile for one round, before the test can be made again. The skill Pilot Ship gives the character a +10 and the skill Secret Language - Seaman gives an additional +10. It is much easier for a sailor to follow the command: „Set top mizzen mast“, rather than „Pull up the sail which is right above the one that flatters so much in the wind“.

Every ship has a handling modifier, detailed in appendix A3. This modifier represents the general difficulty to manoeuvre such a ship.

The Pilot test is further modified by this modifier.

Rigging

Rigging is tested against Dexterity. The relevant skill is Rigging. It can be used in two ways: the first is to actually raise or lower a sail, the second is to know which sails must be risen or lowered to make the best speed. The former is only modified with a -10 for every wind level above level 9 on the weather table. The latter is not modified by the wind, instead the character receives a +10 if he also has the skill Pilot Boat.

Rowing

Rowing is tested against Strength. The relevant skill is Row. Normally the character does not have to make rowing tests. Such tests are only necessary, when a rowing ships tries to gather ramming or battle speed. In this case a test is necessary to determine, if the character is able to provide the necessary speed without interfering with the other oarsmen.

Sailing

Sailing is tested against dexterity. The relevant skill is Sail. Sailing tests are only necessary, when a character has to do a more challenging tasks. Otherwise the skill sailing only reflects, that a character is able to work on a sailing ship without any major problems.

New Skills

Astronomy: Astronomy works just the same as on land. The only difference is, that it is much more important for navigation on water than on land.

Navigation: While finding the way on land is quite simple with all the mountains, forests and hills around, it is much more difficult on sea. Navigation allows a Int-test with -20 to find out were the ship may be, unless the coastline is visible in which case the Int-test is unmodified.

Combined with astronomy the Int-test on the open sea is unmodified.

Ocean Lore: Just like river lore, ocean lore is a skill to read the sights of the wind and the stream and deduce the existence of land or a storm.

Pilot Ship: This skill represents the ability to pilot (i.e. command a ship). For ease of use the skill has only to be learned once to pilot rowing and sailing ships.

Rigging: Rigging is a special skill, that means, that a person is able to operate the sails on a ship. Compared to sailing rigging does not mean, that someone is able to sail a ship, he is merely able to pull the right rope at the right time. The skill also allows to repair and construct the rigging of a ship.

Sec. Lang.: Sailors have a language of their own and therefore a Secret Language Skill Sailors has to be learned to give commands upon a ship and to understand them.

Ship Building: Ship Building is a new skill. While boat building is used to make simple river vessels, ship building is used to plan and build the more complex ocean-going vessels. This skill only allows the building of the hull and the masts. Rigging is an art of its own. Ship Building gives a +10 on all construct test concerning the building

Spec. Weap.: Besides the specialist weapons of the rules rulebook, ship's weapons require a separate skill. The reason for this is the stronger wind on the sea and the fact, that the target is moving quite fast. The operation of Heretic Purification belongs to Specialist Weapon Incendiaries .

APPENDIX F - MONSTERS

Giant Turtle

M	WS	BS	S	T	W	I
4	45	0	4	4	17	32
A	Dex	Ld	Int	Cl	WP	Fel
1	-	-	14	30	30	-

Alignment: Neutral

Attacks: The attack is a bite attack.

Armour: The shell gives it two points of armour, except for the legs and feet with have one point of armour.

Psychological Traits: Immune to psychological attacks.

Giant Octopus/Squid

M	WS	BS	S	T	W	I
3	40	0	8	8	17	60
A	Dex	Ld	Int	Cl	WP	Fel
8	-	66	2	66	66	-

Alignment: Neutral

Attacks: Octopuses and Squids can chose to pin, when attacking and pin an opponent with a single successful attack. The victim is then dragged under water within two rounds unless he inflicts three wounds to the tentacle or making a successful strength test $\times 10$.

Armour: 1 point of armour on the body and the tentacles.

Psychological Traits: Immune to psychological effects.

Sea Snake

M	WS	BS	S	T	W	I
4	33	0	1	3	3	30
A	Dex	Ld	Int	Cl	WP	Fel
1	-	24	6	43	43	-

Alignment: Neutral

Attacks: A successful attack leaves the victim with two rounds of agony before dying unless he passes a poison test $\times 10$.

Armour: None

Psychological Traits: Immune to psychological effects.

Sea Drake

M	WS	BS	S	T	W	I
6	60	0	7	7	55	30
A	Dex	Ld	Int	Cl	WP	Fel
6	-	85	45	85	85	-

Alignment: any (mostly neutral)

Attacks: one attack may (50%) be a breath attack fire which is cone-shaped (24 metres long and 8 metres wide at its widest point.

Armour: 2 points of hide

Psychological Traits: Causes fear in creatures below four metres and terror in creatures below two metres.

Siren

M	WS	BS	S	T	W	I
1	50	0	0	0	5	25
A	Dex	Ld	Int	Cl	WP	Fel
1	-	12	23	20	20	-

Alignment: Evil

Attacks: A successful attack causes stupidity.

Armour: None

Psychological Traits: Subject to instability when outside their bounded area. Do not cause fear.

Shark

M	WS	BS	S	T	W	I
7	55	0	5	4	4	43
A	Dex	Ld	Int	Cl	WP	Fel
2	-	10	10	10	10	-

Alignment: Neutral

Attacks: Both attacks are bite attacks. When the attack is successful, the shark tries to drag the victim underwater.

Armour: None

Psychological Traits: Immune to psychological effects.

Water Zombie

M	WS	BS	S	T	W	I
4	25	0	3	3	5	10
A	Dex	Ld	Int	Cl	WP	Fel
1	10	10	14	14	14	-

Alignment: Neutral

Psychological Traits: Immune to psychological effects, cause fear in living creature they attack

Whale

M	WS	BS	S	T	W	I
3	30	0	10	8	19	30
A	Dex	Ld	Int	Cl	WP	Fel
1	-	30	25	20	20	-

Alignment: Neutral

Attacks: Bite or Ram attack.

Armour: None

Psychological Traits: Causes fear in creatures below four metres. Immune to psychological effects, when the young are attacked all whales of the same school become subject to hatred.

This is the profile for an average whale.

Demon Whale

M	WS	BS	S	T	W	I
3	40	0	10	8	25	40
A	Dex	Ld	Int	Cl	WP	Fel
2	-	40	25	25	30	-

Alignment: Chaotic

Attacks: Bite attacks, when the attack is successful, the Demon Whale tries to drag the victim underwater.

Armour: 1 point of armour.

Psychological Traits: Causes fear in all creatures below four metres. Subject to hatred against all living things, otherwise immune to psychological effects.

Ghost Ship

A ghost ship is often an older type of ship. It is ethereal and subject to instability, should it leave its area of existence.

Regardless of the wind, the Ghost Ship can always move at maximum speed, for the statistics refer to the tables above.

A Ghost Ship causes fear to any other creature below four metres.

The crew of a ghost ship is generally less than the standard crew of the appropriate ship type. The crew may consist of any number and combination of undead creatures. A ghost ship cannot use any weapons, except for ramming attacks and boarding attacks, even if it has a ballista or catapult.

APPENDIX G - DISEASES

Dropsy

A character gets dropsy with a chance of 90%-(T×10). The test is made every week while on a ship.

Once the character has dropsy, he loses half his toughness and half of his WS and BS.

Every day, he has a chance of 30% of recovery, in which he recovers 1 point of T and 10 points of WS and BS a day.

Heatstroke

A character can only get a heatstroke, when he is either in an area with a temperature above 30°C or his head is directly exposed to the sun. He gets a heatstroke with a chance of 35%, plus 10% for every 5°C above 30°C, minus T×1. (E.g. Alrik is far in the south, where the temperatures are around 45°C. The base chance is therefore 65%. Since Alrik has a T of 8, the chance is 57%). Heatstroke can be avoided by covering the head, by avoiding exposure to the heat and by frequent drinking.

Once a character suffers from heatstroke, all his attributes are reduced to 10% of normal (rounded up). Every ten minutes in which the character is exposed to the sun, he loses 1 or 10 points of every attribute, until he is dead.

If the character is brought in the shadow, he recovers 1 or 10 points of every attribute in one hour (2 or 20 if the character is sleeping).

Malnutrition

Malnutrition can hardly be put in a gaming scheme, instead the GM should decide if the characters receive enough food.

I suggest, that any character that suffers from malnutrition loses 1 or 10 points of every attribute every second day until dead. The attributes begin to refresh at double this rate, when the character has access to sufficient food.

Scurvy

Scurvy is also a disease that is caused by malnutrition, in this case by the lack of vitamin C. Unfortunately this is not known, as the suggested treatments above show.

Again the GM should decide, when the character begins to suffer from scurvy. Every day the character suffers from scurvy he loses 1 point of T and W until reduced to zero, in which case the character is dead.

Unless the character has less than 20% of his T and W, in which case he cannot be saved and would need a massive injection of vitamin C, the loss stops, when he eats oranges, lemons or other food, that contains vitamin C. He then recovers at half the rate, that he lost T and W. Unfortunately teeth do not grow back and sores of the gum can lead to nasty infections, as well as the character may have other infections, that can kill him.

Lunacy

Our scholar above was wrong, the reason really is that the sailors hit their heads on the low beams. And lunacy was really a problem in the Royal Navy.

Should the GM really wish to incorporate this, I would suggest, that every character has to make a Dex-test every time he runs below decks or suffer a wound.

APPENDIX H - BLOODY MURDER

This is a small introductory adventure, that can be used to introduce the PCs to ships and navigation.

The setting

The PCs are for one reason or another on board the ship Gischtkrone. The Gischtkrone is on its way from Marienburg to Bilbali. The trip will take about nine days.

The Gischtkrone is a sloop with two masts. The owner and captain is Marius Lübke from Marienburg and he is familiar with the waters, since he makes the journey regularly. Most of the time Marius is transporting rare herbs and cloths, that take little room, but guarantee a reasonable profit. Besides these goods, Marius is also carrying passengers, that need to go to Estalia quickly.

The Gischtkrone has a crew of 35 men including Marius. Most of them are normal sailors, except for Thomasius, who is the ships cook, and Avron, who is the helmsman.

Thomasius, who does not seem to have a last name, comes from Tilea and has worked on the Gischtkrone for three years. Marius trusts him and the two seem to get along quite well, although Thomasius is reserved towards the passengers and hostile towards anyone, who complains about the food. Avron Magnuson on the other hand is a quiet man, he spends most of the day behind the rudder looking to the horizon. He is a native of Norsca, but seems to have lived in Marienburg for a long time, because he speaks Reikspiel without any Norscan accent, instead having a strong Marienburg accent. Marius and Avron rarely speak a word, but seem to know each other quite well, without using too many words. Upon question Marius will tell, that Avron is helmsman and navigator on his ship from the first voyage on and that he trusts him absolutely.

The rest of the crew consists of ordinary sailors mostly from Marienburg. Most of them have

already spend some time in the service of Marius, but he knows none of them very well.

Besides the PCs are a number of other passengers on the ship. First of all a couple from Estalia, who had spend two years in Marienburg and return home. They have a child, that is a constant nuisance and keeps looking into other peoples bags all the time. Then there is a group of three, two woman and a man, that are identifiable as clerics of Myrmidia. One of the women is not older than twenty and it seems to be her trip to the initiation in the temple of Myrmidia in Magritta. Upon question the three will introduce themselves as Frank Fahrndenburg (the man), Andrea Haug (the woman) and Iris Berg (the girl). All three come from Middenheim and Frank and Andrea accompany Iris on her trip to Magritta.

Then there is an Arab by the name of Hassan Ibn Sabah, who trades in herbs and makes the trip to deliver a special package to Bilbali. He comes from Marienburg and has lived there for twenty years. He spends his days in his cabin, because he is seasick (although the PCs should not be aware of this).

The last person on the ship is Edeltraut Burgman from Bergsburg. She is a cleric of Shallya and at sixty-nine, rather old. She is very easy to get along with and may be the first person, the PCs have contact with.

The voyage

The voyage takes place late in autumn and most ships have already stopped their tours. With the coming winter most captains shun the dangers of storms around the peninsula of L'Anguille and only the heavy cogs will continue to sail from Marienburg keeping business in the city alive.

This is the last voyage of the Gischtkrone and everyone who asks can learn, that Marius will spend the winter in Bilbali and not return to Marienburg until spring. The weather is already pretty lousy, as rain soaks every piece of cloth and the sloop rocks and rolls in the water.

Every PC should make a T-test every day for not getting seasick. A failure means, that the PC has to spend the next few hours on the reeling, all attributes are halved and the next meal should be avoided. For every day spend on the ship, the PC gets a bonus of 1, since the stomach gets accustomed to the constant shaking.

The Trip

The first days are uneventful for the PCs unless they are spending their time with inspecting their last meal for a second time. Therefore the only way to find a little diversion is by talking to the other passengers.

The couple is quite easy to get along with. They are talkative and will tell their whole story, whenever the PCs asks. They both come from Bilbali, where the man worked in a storehouse of de Kuypers (see Marienburg sourcebook). Two years ago, he was „ordered“ to Marienburg to work there and is now returning to Bilbali to become manager of the de Kuypers trade that goes through Bilbali. His wife will more often than necessary point out, that the weather in Marienburg is quite bad and that the people are unfriendly. Their little boy will during the whole journey ask the PCs stupid question, often more than once, he may also attempt to steal something from the PCs bag.

The group of three mostly keeps to themselves, with the exception for the dinner, during which they sit at the table with the PCs. Although they spend most of their time in their cabin, they are friendly towards the PCs and will talk about religion, politics and basically everything. The girl (Iris) will hardly ever leave the cabin, except for dinner and will always be accompanied by one of the other two. Should the PCs ask, Frank or Andrea will tell them, that they have to bring Iris to Magritta. Both will treat Iris with much more respect, that one can expect.

Hasan Ibn Sabah spends most of his time in his cabin. He is seasick and will only drink a glass of water during dinner, hardly eating anything. Should the PCs monitor him, they will become aware, that Hassan leaves his cabin two times

in a day and walks into the cargo room, where he spends about half an hour. In this room are the herbs he transports and Marius can point the sacks out, although he may be suspicious why the PCs may have interest in them. The sacks contain rare herbs, none of them are illegal, but some can be used in certain spells (Herb Lore to know that). In one sack is also a small bag with drugs. Hasan uses these drugs to fight his seasickness and they do not have an addictive effect.

Edeltraut Burgman seems to be accustomed to ships and spends most of her time on deck. She is friendly and always looks for a chat. She will tell the PCs, that she comes from Bergsburg and has spent all of her life in the temple of Shallya there. She is on her way to Bilbali to work in the temple of Shallya there, although she gives no reason, why she was sent there. Although Bilbali certainly has a temple of Shallya, it is definitely not a big or important temple, but a ordinary hospice. She may eventually drop a word, that she worked as an apothecary in Bergsburg.

Bloody Murder

The trouble begins on the third day of the journey. The following is a chronology of the events, should the PCs be unable or unwilling to intervene. The GM should make clear, that who- or whatever did this cannot be caught after the ship has reached Bilbali.

3rd Day

On the morning of the third day, the PCs awake with the cries of some of the crewmen. Shortly afterwards a member of the crew can be heard on the deck talking to Marius in a heavy Marienburg accent. The only things that can be understood are, that a person is dead and that the sailor refuses to get the body from the mast.

Since the ship is now fully alive, the PCs are unable to sleep and it may be a good idea to go on deck. When they step into the light they see a corpse hanging from the highest mast. The sailor is about 1,8 metres tall and quite heavily built. The body was hanged eight metres above

deck with a hook, that was pushed through the throat. The person is, quite obviously, dead. After some argument two sailors are sent into the rigging to bring the corpse down. The corpse is placed on the deck and anyone can take a look, before Marius orders the corpse to be brought below deck and places in the cargo room until the ship reaches Bilbali.

Marius can tell the PCs, that the sailor was a member of the night watch and was on the ship till this year's spring. All the others of the night watch have seen or heard nothing. It is quite clear, that the sailor died by the hook, that was driven through his neck and was not stabbed or poisoned before (Int-test with +10 for Heal Wounds, Manufacture Drugs, Manufacture Poisons, Prepare Poisons, Surgery; not cumulative). A PCs that wants to inspect the rigging can do so with a difficult climb test (easy with Scale Sheer Surface). No traces can be found there, except for some blood (of the victim).

The rest of the day is uneventful, although the crew is pretty nervous and speaks of bad omens.

4th Day

During the night, the wind has become stronger and the ship is rocking and rolling in the sea. The atmosphere on the ship is quite depressed and everyone tries to distract himself by work or gambling.

5th Day

The day is again uneventful. Marius hopes to get into more quiet waters soon.

In the evening the dinner is served. As the group sits around the table and has dinner, Thomasius suddenly breaks from the kitchen, wielding a knife and attacking Iris. The PCs can protect her, otherwise Andrea or Frank throw themselves in the way of Thomasius and kill him with a dagger. In any way, Thomasius is dead and Iris alive.

The PCs can search the corpse of Thomasius and are able to find black spots on the tongue. An Int-test by a PC with Herb Lore gives the

information, that the spots may have been caused by Schwarzkuppe, a rare herb, that leads to hallucinations. Hasan can also point this out, should none of the PCs have the skill. The herb is extremely rare and can only be found north of Marienburg, it is outlawed throughout the Empire (Int-test with Law).

Should a PC search the cargo, for traces of Schwarzkuppe, he can find a small bag with dried black flowers among Hasan's cargo, with an unmodified search test, the PCs can also find the bag with Hasan's drugs (s.above).

Hasan will deny any knowledge of the bag with the flowers, but will tell the PCs, that it is in fact Schwarzkuppe (interrogate test, if they accused him before). Should the PCs present their findings to Marius, he will immediately decide to lock Hasan in his room and hand him over to the officials in Bilbali. Hasan is then locked in his room and a sailor is placed as a guard in front of the door.

5th Day - 6th Day (night)

After the last events the crew is extremely suspicious and groups of sailors can be seen, that talk about the recent events and pointing at one passenger or the other.

During the night between the fifth and the sixth day, the PCs can hear prayers from the room of Frank, Andrea and Iris, as well as from the room of the couple (who pray to Manann). The room of Edeltraut is quiet (I-test to notice this).

In the middle of the night, the PCs are awoken by a scream coming from the aisle. Immediately the whole ship is awake and everyone is coming from their room. Upon entering the aisle, the PCs see the boy of the couple in a nightgown with a snow-white face. He seems to be under shock and can only mumble a few things about a snake. Although Marius is quick to point out, that no snake can be mobile during such a cold time of the year, the PCs can catch a few words from sailors, that the Arab must be guilty and that he should be thrown overboard, before anything more happens. Should the PCs check the room of Hasan, he will be throwing up into a bucket and

the sailor standing guard can tell, that he has not heard something suspicious from the room.

The guard can tell, that he saw the boy leaving his room, but could not see anything, when the boy screamed, because the door to Hasan's room is on the other end.

The PCs can lay their heads to rest for the rest of the night.

6th Day

The sixth day is uneventful, as the PCs can do some investigation. The atmosphere among the sailors becomes more hostile against Hasan and Marius has to do some arguments to quiet them down.

7th Day

Again the day is uneventful and the atmosphere relaxes a little bit. The ship will reach Bilbali on the evening of tomorrow.

During dinner, the food is now prepared by another crewman and mostly consists of tasteless fish and bread, the captain brings glasses of schnapps from the kitchen. While serving them, Marius pushes two glasses over and they have to be replaced during which the tablet is brought back to the kitchen. When Marius finally hands out the Schnapps, the couple gets poisonous drinks. Shortly after drinking, they grip to their throats, cuff, stand up and finally drop to the floor. Clearly they have been poisoned. Due to the strong scent of the schnapps, the poison cannot be identified.

All other drinks are not poisoned. The captain can tell the PCs, that he ordered the temporary cook to prepare the drinks and place them in the kitchen. The temporary cook will tell everyone, who asks, that he has put the glasses on the tablet about two hours before dinner and that during that time, everyone had access to the kitchen and that he was not always present during this time. He himself has seen no one.

The rest of the night is uneventful.

8th Day

Nothing happens during the day, while the Gischtkrone approaches Bilbali. Shortly before dusk, the ship reaches the harbour and everyone leaves the ship.

Solution

Here are hints, that the PCs may be able to find and that help them in their investigations.

The sailor was quite clearly killed in a rather brutal way. The killing required a massive amount of strength, even two sailors had problem to get the corpse down. Secondly no one has heard or seen something, which is very unlikely, since a sailor of that strength surely would have defended himself. Upon first look, the only person to do such a killing is Avron, who also had the night shift.

The second murder backfired. It is more or less clear, that Thomasius was doomed to kill Iris and would have, if the PCs or Frank and Andrea had not intervened. The drugs were found among Hasan's cargo, but is he the only one, who had knowledge about poisons?

The third event involved a snake. It is pretty unlikely and very obvious, that snakes hardly can be found on ships, except for water snakes, which on the other hand cannot be found in such cold waters. Therefore the snake must be brought onto the ship, but no snake can be found.

The forth murder again involved poison. Hasan was in his room and has not left it, so he cannot have done the murder. Secondly two glasses were poisoned and had Frank and Andrea not just saved Iris from Thomasius?

These obvious hints lead to the following: The murderer wants to kill Iris. The first murder was just an „accident“, since the sailor possibly has seen the murderer. The second attempt backfired. The snake was discovered by the boy and this attempt again futile. The fourth attempt was to kill two people, since the glasses were already placed in order on the tablet, it would have killed Frank and Andrea, which left Iris without protection. Which leads to the result, that Iris was the target of the murder.

This again leads to the question, who wants to kill a young girl. The PCs should already be aware, that Iris is in one way or the other special, because she is accompanied by two elder clerics, which is definitely not normal.

Iris wants to become an initiate and later a cleric of Myrmidia, so the question is what Myrmidia may stand for. Myrmidia is a goddess of war and battle. The enemies of Myrmidia are of course the chaos gods, and also to a part Ulric. Yet there seems to be neither a chaos follower, nor a priest of Ulric be on board.

One person may have stirred the attention of the PCs: Edeltraut. She seems to be used to be on a ship (she is the only one besides the crew not suffering from any seasickness), yet she claims to have spend all her life in Bergsburg. She tells the PCs, that she is travelling to the temple of Shallya in Bilbali, but has anyone ever heard of a more important temple of Shallya in Bilbali and why should an old woman as Edeltraut be ordered to such a remote temple. The reasons for these are, that Edeldtraut is nothing than a disguise. She is in fact much younger (31) and a follower of Tzeentch. She is a trained Illusionist and has the spell Assume Illusionary Appearance stored in her ring. The spell does not require her to spend additional MP. Should the PCs search her cabin, they also find the skin of the face of an old woman, the ingredient that is necessary for the spell. To kill the sailor, Edeltraut has used the spell Hammerhand, which increases her already good strength by two.

The End

Although the hints are there, the PCs may not be able to discover them. Should they be unable to find out the murderer, they will learn of a watch captain in Bilbali, that Iris, who waited for a ship to Magritta, was kidnapped. Also Frank and Andrea may approach the PCs a few days later in a tavern and tell them that Iris was kidnapped and ask for their help. There they will tell the PCs, that Iris was born with a mark, that is considered holy in the church of Myrmidia and that children with this mark,

which resembles a sword, have to be brought to the temple in Magritta and from among them the head-priests are generally chosen.

Should the PCs for one reason or another return to the ship after the passengers have left, they will have the opportunity to search all cabins. There they can find the skin of the face of an old woman in Edeltraut's room, which should lead the to the solution, that Edeltraut may be the murderer.

After the last events, Hasan is given to the officials, who question him. Should the PCs speak in favour of him, he will be released after two days of interrogation, otherwise he will be released after a week in which the officials were unable to prove any foul play on Hasan's behalf.

Where has Edeltraut brought Iris? This may lead to a longer adventure, as the PCs have to cross the mountains of Estalia or possibly venture to the dark lands. It is up the GM, if he wants to develop this idea further or not.

NPCs

Marius Lübbe (sea captain)

M	WS	BS	S	T	W	I
3	49	32	5	5	6	48
A	Dex	Ld	Int	Cl	WP	Fel
1	64	55	61	65	53	51

Skills: Astronomy, Boat Building, Cartography, Numismatic, Orientation, Pilot Ship, Rigging, Sailing, Secret Language Seamen, Speak Additional Language - Estalian, Specialist Weapon - Fencing Sword, Strike Mighty Blow

Trappings: Rapier, Maps, Telescope, Compass, Astrolabium, Ship

Thomasius (ship's cook)

M	WS	BS	S	T	W	I
3	44	32	3	4	9	52
A	Dex	Ld	Int	Cl	WP	Fel
2	34	28	28	25	28	32

Skills: Cook, Consume Alcohol, Dodge Blow, Sailing, Secret Language Seamen, Swim

Trappings: Kitchen Knives

Magic Points: 26

Avron Magnuson (navigator)

M	WS	BS	S	T	W	I
3	44	44	6*	2	8	35
A	Dex	Ld	Int	Cl	WP	Fel
1	48	43	59	39	48	36

Skills: Astronomy, Cartography, Consume Alcohol, Fish, Navigation, Orientation, Pilot Ship, Rigging, Row, Sail, Secret Language - Seamen, Sea Lore, Very Strong*

Trappings: Short Sword, Leather Jerkin

Frank Fahrndenburg (Cleric Level 2)

M	WS	BS	S	T	W	I
3	33	41	3	3	10	46
A	Dex	Ld	Int	Cl	WP	Fel
1	43	45	40	34	49	34

Skills: Arcane Language - Magick, Cast Spells - Clerical 1/2, Identify Undead, Magical Sense, Meditate, Public Speaking, Read/Write, Scroll Lore, Secret Language - Classical, Speak Additional Language - Estalian, Specialist Weapon - 2H-Weapons, Strike to Injure, Theology

Trappings: Bastard Sword, Religious Symbols, Mail Vest

Magic Points: 14

Andrea Haug (Cleric Level 2)

M	WS	BS	S	T	W	I
4	40	42	4	4	10	56
A	Dex	Ld	Int	Cl	WP	Fel
1	37	38	39	38	58	34

Skills: Arcane Language - Magick, Cast Spells - Clerical 1/2, Identify Undead, Magical Sense, Meditate, Public Speaking, Read/Write, Scroll Lore, Secret Language - Classical, Speak Additional Language - Estalian, Specialist Weapon - 2H-Weapons, Strike Mighty Blow, Theology

Trappings: Warhammer, Shield, Religious Symbols, Leather Jerkin

Iris Berg (Initiate)

M	WS	BS	S	T	W	I
5	31	32	2	2	6	26
A	Dex	Ld	Int	Cl	WP	Fel
1	34	35	31	42	44	27

Skills: Read/Write, Scroll Lore, Secret Language - Classical, Theology

Trappings: Robe, Amulet of Myrmidia, Short Sword, Mail Collar, Mail Vest

Edeltraut Burgman (Illusionist Level 3)

M	WS	BS	S	T	W	I
3	50	38	5	5	9	63
A	Dex	Ld	Int	Cl	WP	Fel
1	50	57	64	51	55	32

Skills: Arcane Language - Illusionist Magic, Cast Spells - Illusionist Battle Magic 1-3, Cast Spells - Petty Magic, Evaluate, Hypnotise, Identify Undead, Magical Awareness, Meditation, Read/Write, Scroll Lore, Secret Language Classical

Trappings: Ring (while wearing, the ring provides a constant Assume Illusionary Appearance spell with a difficulty of -30 to dispel or recognise), dagger (poisoned),

Magic Points: 31

Hasan Ibn Sabah (Herbalist, Pharmacist)

M	WS	BS	S	T	W	I
5	33	32	3	3	6	34
A	Dex	Ld	Int	Cl	WP	Fel
1	43	29	58	31	39	34

Skills: Arcane Language - Druidic, Chemistry, Cure Diseases, Heal Wounds, Herb Lore, Identify Plant, Manufacture Drugs, Prepare Poison, Read/Write, Secret Language - Classical, Speak Additional Language - Arabian

APPENDIX I - DEFINITIONS AND PHRASES

Here are a number of terms, that are used on a ship. The list is in no way comprehensive, but anytime someone wants to do service without the skill Specialist Language - Seamen, you can use these words and phrases on him.

-A-

Abaft or Aft: the Stern, or after part of a Ship
 The Mast hangs Aft: towards the Stern
 Amain: Lower your Topsails; or if spoke to an Enemy, signifies Yield
 The Anchor is a Cock-bell: hangs up and down by the Ship's side
 The Anchor is Apeck: right under the Hawse
 The Anchor is foul: when the Cable is got about the Fluke
 An Awning: a Sail set up like a Canopy to prevent the scorching of the Sun

-B-

To Bale: to lade Water out of the Ship's Hold
 The Ballast shoots: runs from one side to the other
 Free the Ballast: to divide or separate it
 To Bear with Land: to sail towards Land
 Bear too: to sail before the Wind
 A Gun cometh to Bear: lies right with the Mark
 Bear up: when they would have the Ship sail more before the Wind
 Bear up: round, put her Right before the Wind
 Belay: to make fast any Rope
 To Bend a Cable: is to make it fast
 A Burth: a place for mooring of a Ship
 A Bight: a part of a Rope
 The Billage: the breach of the place the Ship rests on when she is a-ground
 The Ship is Bilged: has struck off some Timber, and has sprung a Lake
 A Bittack: that whereon the Compass stands
 The Bitts: two square pieces of Timber, to which the Cables are fastened, when the Ship rides at Anchor
 A Bonnet: an additional Sail added to the other Sail
 Lace on the Bonnet: to fasten it on

Shake off the Bonnet: to take it off

A Boom: a long Pole to spread out the Clew of the Sail

Board and Board: when two Ships touch one another

Board it up: turn to the Windward

Go a Board: or go into the Ship

Bow: the front part of a ship/boat

Break Bulk: to take out the first Goods of the Cargo

-C-

Careen a Ship: laying the Ship on one side, to trim and caulk the other

Caulking: is the driving of Oakham into the Ship's Seams, to keep out Water

To Chase: is to pursue another Ship

The Chase: the Ship pursued

Cockpit: the ship's hospital

To Cond or to Cun a Ship: is to order the Man at the Helm, how he is to steer

The Course: the Point of the Compass on which the Ship sails or ought to sail; the Sails are commonly called Courses

Cut, or unfurl the Sail: is to let it loose and fall down

Cargo: is the ship's whole Loading

Caskets: little Ropes which tie up the Sail when it is furled

How Chear Ye: is how do you all do

-D-

Dance of the Dead: a ship sailing or rowing without a pilot, although such is needed

Davit: simple crane on a ship

Dead: a ship in difficult waters without a pilot

The Deck is flush, afore and aft: is laid from Stern to Stern, without any Heights or Hollows

Dead Water: the Eddy at the Ship's Stern

Dispart: to find the difference of Diameters in the Bore of a Cannon

-E-

End for End: when a Rope is run all out of the Block wherein it was

-F-

To hand or furl a Sail: to wrap the Sail all together, and bind it close to the Yard

To fish a Mast or Yard: to tie a piece of Plank to the Mast or Yard to make it stronger, and that same Plank is called a Fish

A Fathom: is six Foot

To strike the Flag: to pull it down, which either shows Respect, or yielding to the Enemy

To heave out the Flag: to untie it from the Staff, and let it fly

Free the Ship: is to put up the Ship dry

Fore: is towards the Head of the Ship

Fluke of an Anchor: is the wed which fastens in the Ground

-G-

Gig: other term for dinghy

To Grave the Ship: is to burn off her old Filth when she is dry, by lying a ground

The Ship Gripes: turns her Head to the Windward more than is requisite

The Weather Gauge: when one Ship is to the Windward of another

The Ships Gauge: is her depth of Water, or how many Foot she draws

God's Tear: Enchanted water, that keeps a barrel of water fresh over a long period

-H-

Hoa, Hoa: to call to another Ship

To hail a Ship: to call to another ship to know whether she is bound, or from whence she came

To hale: is to pull

The Hause: is the hole at the Head of the Ship through which the Cable goes

Fresh the Hawse: is to disengage two Cables, when twisted, by veering out more Cable, least the one should chase the other

Thuart the Hause: is the same

The Ship lies thuart: cross another Ship's Hause or Head

The Ship Heats: lies more to one side than another

Heretic Purification: a kind of Greek fire

To Hitch: to make a Rope fast

The Ship's Hold: the place where they stow all Goods, or Stores in

To Hoise: to lift, or hale

Huk: peninsula

Hulk: ship without sails and rigging

Hulling: when a Ship is taking in her Sails

-J-

Jack Tar: general term for every sailor

-K-

Kedging: to pull the ship free with the help of an anchor and a winch

Khorne's Blood: tar

-L-

Land Fall: is Expectation of Land

Land lock'd: circumferenced by the Sea

The Ship lies Land too: when she can only discern Land

To lay the Land: to be without sight of Land

Landlubber: sailors that are new and have no knowledge of navigation

To Launch: to put a Ship forth out of the Dock

Launch hoa: hoist no more

Lee Shore: the Shore that the Wind blows against

Have a Care of the Lee Latch: go not too much the Leeward

The Ship lies by the Lee: or she has her Sails lying against the Shrouds and Mast

Letter of Marque: the license that makes the difference between a pirate and a privateer

Loblollyboy: the assistant of the surgeon

-M-

The Masts are shot by the Board: when a Ship has lost her Mats by the Enemies shot, and they lie upon the Deck, or on the outside

Set the Mizen: sit the Mizen Sail

Change the Mizen: bring the Yard to the other side of the Mast

Speek the Mizen: put the Yard right up and down

Spell the Mizen: let go the Sheet and peek it up

Moor the Ship: is to make her ride at Anchor safely

-N-

Neap Tides: those Tides which fall when Mannslieb is in her second and last Quarter, and are neither so high nor low, as Spring Tides

The Ship is Beneap'd: when the Water is so low as not make the Ship float

Nurgle's Spit: a porridge of grain and hot water

-O-

To overset: is to turn over

The Ship stands for the Offing: when the Ship stands out to the Sea from the Shore

Offward: from the Shore

Orlop: lowest deck on a sailing ship

-P-

Poop: small structure on the aft, usually the place for the rudder wheel and the navigator

-S-

To pay a Seam: to lay hot Pitch and Tar on the Seams of the Ship after caulking, without any Canvas

To parcel a seam: after the Seam is caulked, to lay over a shred of Canvas, and then Pitch it all over

The Ship Rides a Peck: when the Yards cross

Port: the left side of a ship/boat

Prick and Cheque Book: the book kept by the purser in which he records the number of men (the „pricks“) and the cargo and money (the cheque)

The Capstern Purcheses: draws in the Cable a pace

-Q-

Quarter Winds: when the Wind comes in abaft, the Main Mast Shrouds even with the Quarter

A Quail of Rope: when a Cable or Rope is laid round, one fack over another

-R-

A Reach: the Distance between the two nearest Points of Land, on the same Shore

To Reve: is to put a Rope through a Block

To unreve: is to pull a Rope out of a Block

To Ride at Anchor: when the Anchors keep her from driving

To Ride athwart: when the Ship lies a cross of the Tide

To Ride betwixt Wind and Tide: when the Wind and Tide are contrary, and have equal Power

To Ride Hause fallen: is when a rough Sea breaks into the Hauses

A Road: a fit anchoring place for Ships to ride at Anchor nigh Land

To Rock: ship's movement over the transverse axis

To Roll: ship's movement over the longitude axis

Rock 'n' Roll: The most common reason for seasickness

Rouse in: to haul in the Cable or Hauser to make it taut

Royal: highest sail on a mast

-S-

To sarve a Rope: to wrap Canvas or small Cord about it to keep it from fretting

The Ship seels: when on a sudden she lies down and tumbles from side to side

The Ship spooms: goes before the Wind without any Sails

To seeze: to make fast a Rope

The Ship sends: when her Head or Stern falls deep in the Hollow of the Sea, commonly called the Trough of the Sea

To settle a Deck: is to lay it lower

The Ship is sewed: when the Water has left her
The Ship shares: when she sails not directly forward upon the Point designed, but wavers in her sailing

Spring Tides: are those at New and Full Mannslied

To sound: is to find the depth of the Water

The Bowsprit steers: stands too upright

Soundings: the several Depths of the Water in Fathoms and Parts

The Ship hath spent her Masts: when she has lost them in a Storm

To splice Ropes: to untwist two Ends of Ropes, and then twist them both together, and fasten them by binding a string about

The Sail is split: blown to pieces

Starboard: the right side of a ship/boat

Stern: the back part of a ship/boat

-T-

A Windward Tide: when the Tide runs contrary the Wind

A Leeward Tide: when the Tide and Wind are both one Way

To Tide it up: to go by the strength of the Tide against, or without Wind

A Tide Gate: where the Tide drives strong

It flows Tide and half Tide: it will be three Hours sooner high Water by the Shore, than at the Offing

Tack about: bring the Ship's Head about

Talle aft the Sheets: hale aft the sheets of the Main or Fore Sail

To Tow: to drag any thing after a Ship
Traverse: the Ship's way

-V-

Veer out: is to let out more Rope or Sheet

-W-

Wahrschau: warning exclamation
The Ship is Walt: wants Ballast
To wind a Ship: to brings her Head about
To weather a Ship: is to go to Windward of her

How does the Ship wind: upon what Point of
the Compass does the Ship's Head lie
To would: is to bind Ropes about the Mast, to
keep a piece of Wood called a Fish, about the
Mast, to strengthen it

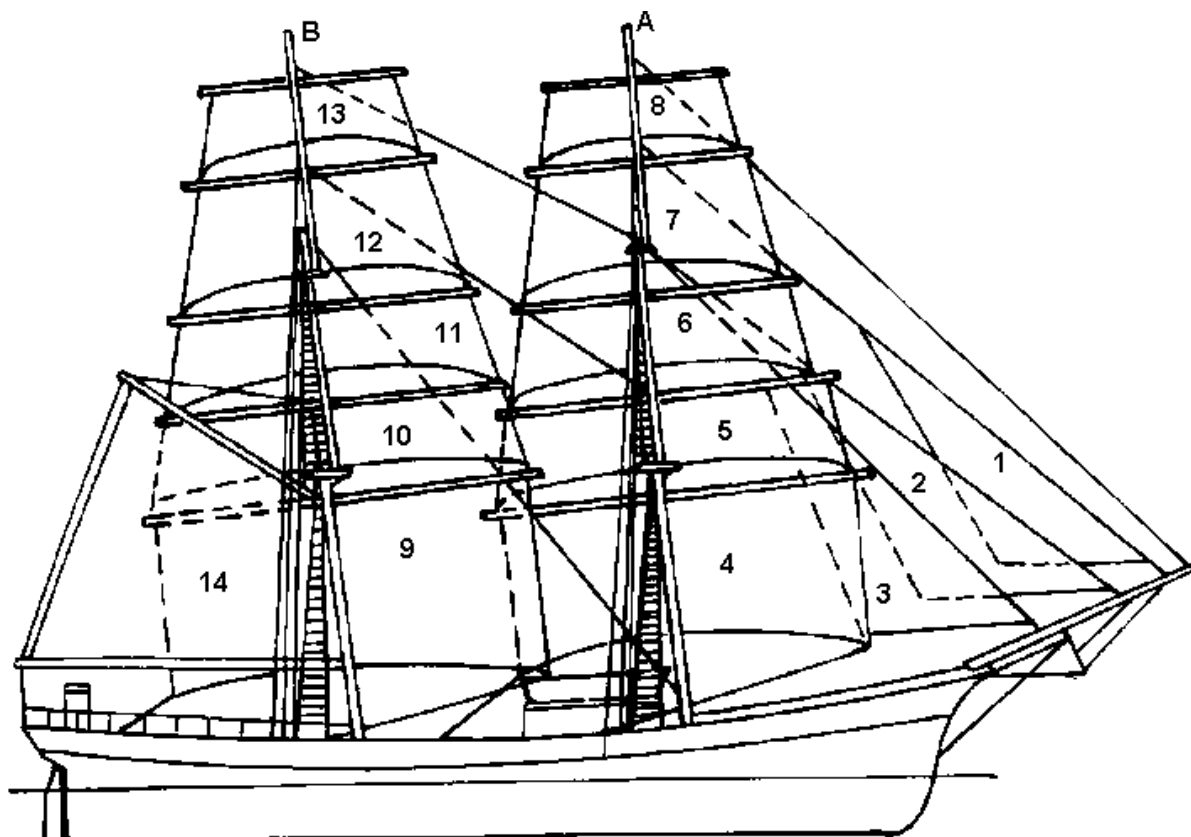
-Y-

The Ship yawns: that is, and does not steer
steady
Younkers: are the young Fore Mast Men

APPENDIX J - THE SAILS

The following pictures should help you to name the different sails on a ship. The biggest mast is always called main mast. The first mast is always called foremast, unless it is the biggest or the only mast. The last mast is always called mizzen mast, unless it is square rigged in which case it is called cross mast. Of course there are hundreds of names for almost any configuration (I know of at last sixteen), but you should not worry too much about it. I have not even tried to give a picture of the names for the different ropes. On a ship as below 170 ropes can be identified and ever rope has its own name, of which no more than ten to twenty are in my dictionary.

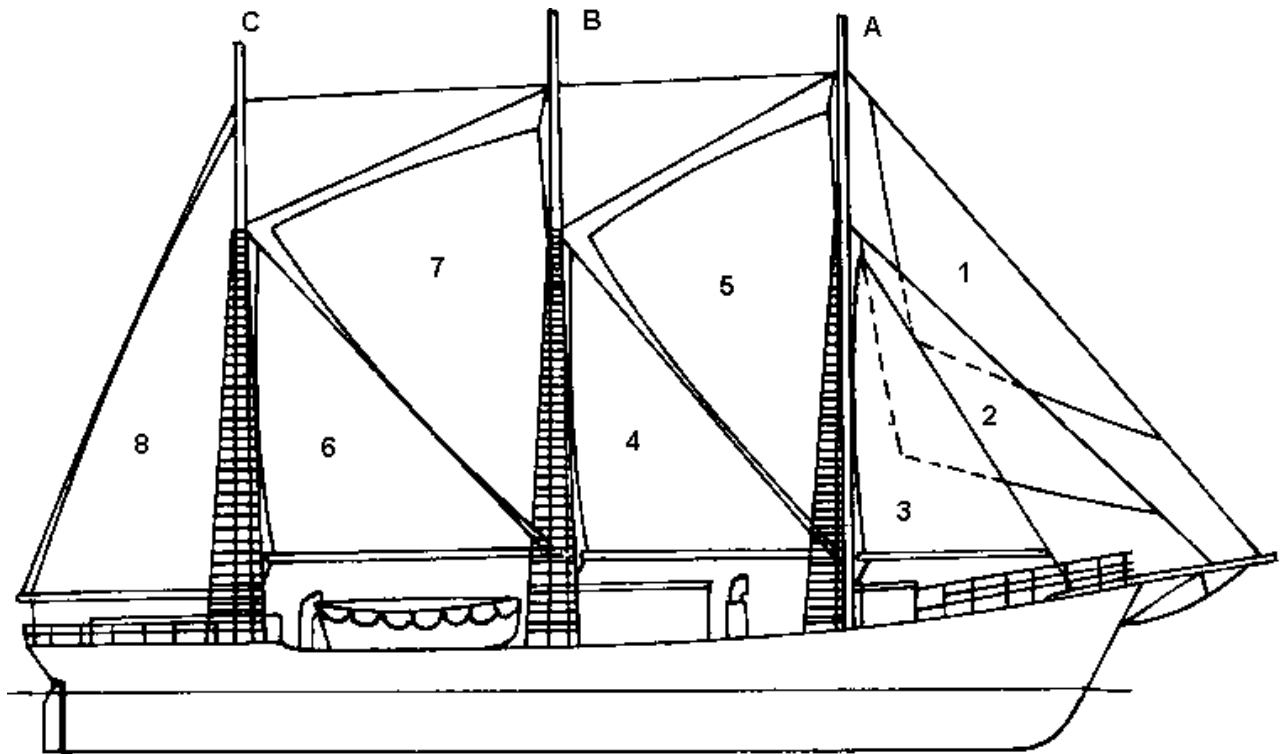
Brig



(1) Outer Jib, (2) Jib, (3) Inner Jib, (4) Foresail, (5) Fore Lower Topsail, (6) Fore Upper Topsail, (7) Fore Topgallant Sail, (8) Fore Royal, (9) Mainsail, (10) Main Lower Sail, (11) Main Upper Sail, (12) Main Topgallant Sail, (13) Main Royal, (14) Brigsail

(A) Foremast, (B) Mainmast

Sloop



(1) Outer Jib, (2) Jib, (3) Sloop Jib, (4) Main Stag Sail, (5) Sloop/Schooner Sail, (6) Mizzen Stag Sail, (7) Main Sail, (8) Mizzen Sail

(A) Foremast, (B) Mainmast, (C) Mizzenmast

APPENDIX K - MEASURES, UNITS AND CONVERSIONS

Below is a number of historical measures and units and the conversion factors to the basic SI-system. The list is by no means comprehensive and I have done my best to find the exact unit and to calculate it correctly into the SI-system.

1 bag	= 109.104 litres
1 barleycorn	= 0.0762 m
1 bucket	= 18.184 litres
1 cable	= 185.3184 m
1 chain	= 20.1168 m
1 fathom	= 1.8288 m (depth only)
1 foot	= 0.3048 m
1 furlong	= 201.125 m
1 gallon	= 4.546 litres
1 hand	= 0.1016 m (used to measure the height of horses)
1 inch	= 0.0254 m
1 knot	= 1853.184 m/h (=1.853 km/h)
1 league	= 4827 m
1 link	= 0.2011 m
1 nail	= 0.0635 m
1 nautical mile	= 1853.184 m
1 ounce	= 0.02835 kg
1 pint	= 0.568 litres
1 pound	= 0.454 kg
1 rod	= 5.0292 m
1 rope	= 6.096 m
1 statute mile	= 1609 m
1 yard	= 0.9144 m

The metre is the basic unit of length. It is the distance light travels, in a vacuum, in $1/299792458^{th}$ of a second.

The kilogram is the basic unit of mass. It is the mass of an international prototype in the form of a platinum-iridium cylinder kept at Sevres in France. *It is now the only basic unit still defined in terms of a material object, and also the only one with a prefix[kilo] already in place.*

The S I unit of volume is the cubic metre. However, this seems to be much less used than the litre (1000 litres = 1 cubic metre).

APPENDIX L - SHIPS PROFILE SHEET

Ships Profile		
Ship's Name: _____	Owner: _____	
Port of Call: _____	Captain: _____	
Nationality: _____	First Officer: _____	
Dimensions of the ship		
Type of Ship: _____	Drive: <input type="checkbox"/> Sailing <input type="checkbox"/> Rowing <input type="checkbox"/> Both	
Length: _____ Width: _____	Height: _____ Draught: _____	
Foredeck: _____	Aftdeck: _____	
Handling: _____		
Crew		
Sailors: _____	Oarsmen: _____	Marines: _____
Sailing Skill*: _____	Rowing Skill*: _____	Rigging Skill*: _____
BS*: _____	Pilot Ship*: _____	Navigation*: _____
Structure and Superstructure		
Number of Masts: _____	Number of Banks: _____	
Rigging of Mast	Number of men on each bank	
Mast #1 _____	Top Bank _____	
Mast #2 _____	Second Bank _____	
Mast #3 _____	Third Bank _____	
Mast #4 _____	Fourth Bank _____	
Rudder: <input type="checkbox"/> one steering oar <input type="checkbox"/> two steering oars <input type="checkbox"/> tiller <input type="checkbox"/> Rudder		
Speed		
Speed sailed (max): _____		Speed oared (max): _____
Characteristics		
Location	Toughness/HP	Wounds/HP
Hull	_____	_____
Rigging/Sails	_____	_____
Oars	_____	_____
Armaments and Weapons		
Type	Range	Effective Strength
_____	_____	_____
_____	_____	_____
_____	_____	_____
Special Equipment		
Type	Place of storage	
_____	_____	
_____	_____	
_____	_____	
_____	_____	

* These are average skills. To get the average skill, add all individual skills and divide the sum, by the number of men. In ship combat, the average skill should be used instead of the individual skills, to speed play.

BIBLIOGRAPHY

The following books were used in the creation of this supplement. Also a number of books are listed here, that were not used, but may be useful for the interested reader.

- | | |
|--------------------------|---|
| Man o' War | This GW book is the first choice for anyone, who wants to conduct battles in the Warhammer World. As with most GW products the rules are pretty simple and fast. The problem with that book is, that can hardly be used for RPG, since it has no rules for individual characters. Also I do not really like some of the aspects that are presented here. For example the dwarven ironclads are certainly not my cup of tea and were thus not included in this supplement. Also it is quite expensive. Two supplements to Man o' War are known to me: Plague Fleet and Sea of Blood. Both contains as far as I can tell rules expansions and new units. Sea of Bloods contains a number of sea monsters. |
| Thorwal | This is a supplement to a German RPG. Although the world is totally different from the Warhammer World, it nevertheless has a number of nice ideas. |
| High Seas | This is an article by Margaret Foy, published in the Dragon Magazine. The article is pretty good, although it partly seems to be pretty unstructured. Strangely it contains the very same verses from the Rime of the Ancient Marines as this supplement. Overall the article is pretty good. |
| Sea Law | This Rolemaster supplement is a very detailed and interesting book. It gives very precise rules concerning adventuring at sea. It is, as all Rolemaster books, quite difficult and complex. The rules include mainly rules for large scale battle, that include a complete set of rules plus counters for playing sea battles. Besides this, it also has some rules and campaign ideas for RPG, that are more or less universal and in my opinion quite useful. The downside of this supplement is, that it lacks a little bit on atmosphere and may appear to be rather dry. |
| The Sea-Man's Vade Mecum | The Sea-Man's Vade Mecum is a historical book, that was originally published in 1707. I do not know, if it is still available in book shops. I have found a part-transcription on http://pc-78-120.udac.se:8001/WWW/Nautica/Bibliography/Vademecum(1707).html . Unfortunately only very few parts were put on the internet. Although somewhat dry and technical, it is interesting to read. |
| GeoEpoche | Das Mittelalter
This is a magazine in Germany, that details certain epochs of time. It is published three or four times a year. Besides a beautiful cover photo of Emma Thompson, this issue has a number of interesting articles, especially one about trading in the middle ages. None of the articles directly influenced this text, but all gave a good impression on the general circumstances of that time. |

- Bardelle, Frank
Freibeuter in der karibischen See
The book discusses piracy in the Caribbean. It gives some interesting facts, but is not very entertaining, but rather abstract in many ways.
- Berling, Peter
Die Krone der Welt, Das Blut der Könige, Die Kinder des Grals, Der schwarze Kelch
These three books are all set in the Middle Ages. Although they only contain little information on navigation, they give a nice impression on the world of that time. The idea of Duchese Maria del Pietronese came from this book, were the duchess of Otrando and her galley is mentioned, complete with the lanceotti. All four books belong together and tell the tale of a brother and a sister. The first three books are quite fun to read, while the forth book goes a little to far to esoteric. All four books have quite offensive passages (some people from the land of the free and home of the brave may call it pornographic), I just mention it before you want to give one of these to your grandma.
- Cordingly, David
Life among Pirates
This book discussed the various aspects of piracy, with a special reference to the image in popular literature. The book is easy and nice to read, but is somewhat restricted to literature and leaves off many aspects that are not mentioned in the popular literature. Nevertheless it is a good book.
- Dudszus; Köpcke
Das große Buch der Schiffstypen
This book contains all the useful information on ships, from the ancients to our time. It is richly illustrated and easy to understand, it is pretty cheap too.
- Jackson, G.
The history and archaeology of ports
A very informative book concerning the history of ports. It is however somewhat dry and definitely only suited for those that want to learn almost any detail about ports.
- Morrison, J.S.
Greek and Roman Oared Warships
An excellent book on galleys and history. It was written for scholars and a cursory knowledge of either Greek or Latin is useful in reading the book. It nevertheless is an excellent book and a main source of information on galleys for this manuscript.
- O'Brian, Patrick
Patrick O'Brian has written numerous books about the adventures of Jack Aubrey and Stephen Maturin. They belong to the best of historical books on navigation and stand in one line with Stevenson's Treasure Island. The only criticism is, that they glorify the British Empire and its navy a little bit too much. A good read and worth buying.
- Puhle, Matthias
Die Vitalienbrüder
This book discusses the history and the background of the Vitalienbrüder. The Vitalienbrüder were a group of pirates in the North and the Baltic Sea. The most famous of their member certainly was Klaus Störtebecker. It is interesting and a good read.

Torr, Cecil

Ancient Ships

This is an interesting book, although it is very technical. It only covers the ships before the fall of the Roman Empire, thus it focuses mainly on galley. This is also the book where I have read about the galleys with forty banks. It also helps if you speak ancient Greek to fully enjoy the book, since about a quarter or more of the text is in Greek.

Regan, Geoffrey

The Guinness Book of Naval Blunders

This book is a highly amusing list of naval blunders throughout history. Raging from the Romans to the Falkland War it is an account of incompetence. Some of the ideas in this text came from the book. It is far more realistic than the romanticised picture of Roderick Random. A good read.

Tre Tryckare

Seefahrt - Nautisches Lexikon in Bildern

This is a richly illustrated encyclopaedia on navigation, starting from the ancients to the modern ships. It was first published in Sweden and was written by a team of experts. It is a good book, but mainly contains illustrations and only little text.

Besides these, a number of encyclopaedia have been used, most notably the Encyclopaedia Britannica, Der Große Brockhaus, Lexikon des Mittelalters and Meyer's Gesundheitslexikon.

